



STOUT STATE UNIVERSITY

Undergraduate Bulletin

Regular Session 1968-1970



Callahan—Tainter—Jeter Hall

Catalog of Courses 1968-1970

Stout State University

MENOMONIE, WISCONSIN 54751

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COLLEGE CALENDAR

Regular Session 1967-68

Monday, September 4	Labor Day
Tuesday, September 5	Registration for First Semester
Wednesday, September 6	Registration for First Semester
Thursday, September 7	Classes Convene
Friday, November 3	Midsemester, End of First Nine Weeks
Wednesday, November 22	Thanksgiving Vacation begins at 1:30 p.m.
Monday, November 27	Classes Resume
Friday, December 22	Christmas Vacation begins at 1:30 p.m.
Monday, January 8, 1968	Classes Resume
Friday, January 19	Commencement, End of First Semester
Monday, January 22	Registration for Second Semester
Tuesday, January 23	Registration for Second Semester
Wednesday, January 24	Classes Resume
Friday, March 22	Midsemester, End of Third Nine Weeks
Friday, April 12	Spring Vacation begins at 11:30 a.m.
Monday, April 22	Classes Resume
Friday, May 31	Commencement and End of College Year

Summer Session 1968

Monday, June 3	Pre-session begins
Friday, June 14	Pre-session ends
Monday, June 17	Summer Session begins
Friday, July 12	End of First Four Weeks
Monday, July 15	Beginning of Second Four Weeks
Thursday, August 8	Commencement
Friday, August 9	End of Summer Session
Monday, August 12	Post Session Begins
Friday, August 23	Post Session Ends

Regular Session 1968-69

Monday, September 2	Labor Day
Tuesday, September 3	Registration for First Semester
Wednesday, September 4	Registration for First Semester
Thursday, September 5	Classes Convene
Friday, November 1	Midsemester, End of First Nine Weeks
Wednesday, November 27	Thanksgiving Vacation begins at 1:30 p.m.
Monday, December 2	Classes Resume
Friday, December 20	Christmas Vacation begins at 1:30 p.m.
Monday, January 6, 1969	Classes Resume
Friday, January 17	Commencement, End of First Semester
Monday, January 20	Registration for Second Semester
Tuesday, January 21	Registration for Second Semester
Wednesday, January 22	Classes Resume
Friday, March 21	Midsemester, End of Third Nine Weeks
Friday, April 4	Spring Vacation begins at 11:30 a.m.
Monday, April 14	Classes Resume
Saturday, May 31	Commencement and End of College Year

Summer Session 1969

Monday, June 2	Pre-session begins
Friday, June 13	Pre-session ends
Monday, June 16	Summer Session begins
Friday, July 11	End of First Four Weeks
Monday, July 14	Beginning of Second Four Weeks
Thursday, August 7	Commencement
Friday, August 8	End of Summer Session
Monday, August 11	Post Session Begins
Friday, August 22	Post Session Ends

Regular Session 1969-70

Monday, September 1	Labor Day
Tuesday, September 2	Registration for First Semester
Wednesday, September 3	Registration for First Semester
Thursday, September 4	Classes Convene
Friday, October 31	Midsemester, End of First Nine Weeks
Wednesday, November 26	Thanksgiving Vacation begins at 1:30 p.m.
Monday, December 1	Classes Resume
Friday, December 19	Christmas Vacation begins at 1:30 p.m.
Monday, January 5, 1970	Classes Resume
Friday, January 16	Commencement, End of First Semester
Monday, January 19	Registration for Second Semester
Tuesday, January 20	Registration for Second Semester
Wednesday, January 21	Classes Resume
Friday, March 20	Midsemester, End of Third Nine Weeks
Friday, March 27	Spring Vacation begins at 11:30 a.m.
Monday, April 6	Classes Resume
Friday, May 29	Commencement and End of College Year

Summer Session 1970

Monday, June 1	Pre-session begins
Friday, June 12	Pre-session ends
Monday, June 15	Summer Session begins
Friday, July 10	End of First Four Weeks
Monday, July 13	Beginning of Second Four Weeks
Thursday, August 6	Commencement
Friday, August 7	End of Summer Session
Monday, August 10	Post Session Begins
Friday, August 21	Post Session Ends

GENERAL INFORMATION

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HISTORY AND OBJECTIVES

Stout State University is one of the nine Wisconsin State Universities and prepares its graduates for professional positions in education, industry and business. It offers the bachelor of science degree in industrial education, industrial technology, home economics, home economics education, vocational education and related fields and the bachelor of arts degree in psychology.

Newly-installed majors, in addition to psychology, include applied mathematics, art, art education, general business administration, marketing and distributive education, preschool education and hotel and restaurant management.

In addition to the major curriculum areas, Stout offers two years of basic liberal studies courses. The master of science degree also is offered in a variety of fields.

The university year is 36 weeks in length. There are two semesters of 18 weeks each. The summer session, which opens each year in June, two weeks after the close of the regular session, is eight weeks in length. Special short courses of one or two weeks' duration are held both before and after the regular summer session.

HISTORY

The heritage of Stout State University is linked to the career, foresight, and generosity of Senator James H. Stout, pioneer Menomonie lumberman. Senator Stout's respect for acquired skill prompted him to establish a program of manual training and domestic science in the Menomonie grade and high schools in 1891.

The program soon outgrew the facilities, however, and by 1893, new buildings were constructed and the Stout Manual Training and Domestic Science School, still a part of the public school system, remained under the patronage of Senator Stout.

Guided by President Lorenzo Dow Harvey, who was appointed in 1903, the school grew and in 1908 changed its name to The Stout Institute as an independent corporation. Three years later and one year after the death of Senator Stout, the institute was put under control of a board of trustees appointed by the state of Wisconsin.

With state support, The Stout Institute continued to progress in the pattern envisioned by its founder. In 1917, state legislative action made it a degree-granting college. Evolution continued under the leadership of President Harvey and Burton E. Nelson; in 1935, the Stout Institute was authorized to offer postgraduate study and to grant the Master of Science degree in industrial education, vocational education, and home economics.

Dr. Verne C. Fryklund became president of the college in 1945. In 1955 the school became Stout State College and was placed under the jurisdiction of the Board of Regents of Wisconsin State Colleges. The school was also authorized to grant the Bachelor of Science degree in industrial technology in addition to the other degrees certified previously.

Dr. Fryklund guided the college through the period of burgeoning enrollment immediately after World War II and saw it well into a major building program before he passed the responsibility in 1961 to Dr. William J. Micheels, an alumnus of The Stout Institute, who became the college's fourth president. In 1964, the college became Stout State University.

In the late 60's the building is continuing, prospects for enrollment show a rising curve, but the university remains remarkably true to the purposes Senator Stout espoused. The reputation of the university, as established and maintained by the success of its graduates, has become world-wide and continues to be unsurpassed in its field.

OBJECTIVES

The objective of any college is to supply its students with knowledge, experience, and service in keeping with its general purpose. The basic objective of Stout State University can be stated in this way: to introduce students to the basic areas and systems of knowledge, to instill in them a desire to examine their lives' experiences critically and to provide the tools with which to make that examination, to induce them to use the knowledge they acquire and the critical faculties they develop to pursue to depth a vocational specialty.

Beyond this general objective, Stout State University has several specific educational aims. It hopes to instill in each student the ability and desire to:

1. Think constructively and creatively.
2. Participate in the discussion and solution of local, national and international problems.
3. Achieve a sense of social responsibility leading to a concern for the improvement of society.
4. Understand and appreciate the ideas of others and express his own effectively.
5. Understand the important discoveries of mankind and their impact on humanity.
6. Comprehend literature, art, music, crafts, and drama as expressions of other's experiences.
7. Attain social and emotional adjustment.
8. Attain a constructive attitude toward change; accept it when it seems necessary, or reject it when it seems unwarranted.
9. Enter a suitable occupation and advance in it to the limit of his abilities.

In addition to the personal values it hopes to help its students realize Stout State University also serves three broad, interrelated functions as an institution chartered by the state:

THE EDUCATION FUNCTION

1. Provide guidance and counseling to aid students in identifying their problems and selecting suitable courses of action.
2. Prepare professional personnel for a variety of levels and types of schools.
3. Prepare persons for professional positions in business and industry.
4. Provide a liberal cultural background for students regardless of specialty.
5. Provide a broad technical background to students preparing to engage in specialized work.
6. Prepare students to transfer to other colleges for specialties other than those offered by the university.

THE SERVICE FUNCTION

1. Provide leadership to the profession in the areas of work offered by the university.
2. Provide professional service to schools in the form of consultation evaluations, in-service education, curriculum planning, and plant development.
3. Provide professional service to business and industry and serve as objective critics in the fields in which the university specializes.
4. Contribute to an improved cultural tone for the community through the production, sponsorship, and promotion of cultural activities.

THE SCHOLARSHIP AND RESEARCH FUNCTION

1. Serve as a stimulus to the continuous intellectual development of the faculty.
2. Be aware of and sensitive to the constantly accumulating body of knowledge in the areas of the university's concentrations and aid in its dissemination.
3. Add to the body of technical and professional knowledge by adaption, analysis, synthesis, and evaluation of existing and developing knowledge.
4. Increase the wealth of knowledge through research in the fields of the university's concentrations.

PIGEON LAKE FIELD STATION

The Wisconsin State Universities sponsor a summer program at Pigeon Lake Field Station near Drummond, Bayfield County, in northwestern Wisconsin. Appropriate course work successfully completed in the various camp programs by students enrolled in the system is credited as residence study by their respective universities.

In the past the camp has been used principally for programs in Art, Outdoor Education, School Camping, and for Field Biology Institutes which have been supported by the National Science Foundation. These programs have varied in length from two to six weeks. Additional course work in other areas will be scheduled for future years.

The field station has been leased from the U. S. Forest Service since 1959 and functions as a natural laboratory in the heart of the Chequamegon National Forest. Sixteen rustic cabins are available, each with a capacity of six to eight students. A dining hall, recreation hall and two classroom-laboratory buildings are situated near 1400 feet of shoreline. Excellent facilities are available for boating, swimming and fishing.

Pending programs are publicized by special announcement in the early spring. For further details contact the registrar or the campus member of the Pigeon Lake Steering Committee.

ACADEMIC INFORMATION

ADMISSIONS PROCEDURES

Application for Admission forms may be obtained by writing to the Director of Admissions or from the office of the Director of Guidance at a high school.

High School students may apply for admission any time after October 1 of their senior year. Students are urged to submit applications no later than March 1. As soon as the completed application is received, the Director of Admissions will evaluate the information and will notify each student regarding his eligibility to enroll. Those who are accepted will receive by return mail a housing application form, a health examination form, and pertinent information describing subsequent steps necessary to complete the admission and registration process.

All applicants for admission are required to participate in the American College Test (ACT) program. The test is administered in centers convenient to every student. Information and application forms are available in the Guidance Department at each high school. The results of the tests are used as criteria for admission and for placement in mathematics and English courses.

ENTRANCE REQUIREMENTS

Students admitted to Stout State consist of three groups:

1. Those who have graduated from an accredited high school.
2. Those who have submitted evidence of studies pursued successfully at an institution of higher education.
3. Those who qualify as adult special students.

HIGH SCHOOL GRADUATES

Entrance requirements for high school graduates are as follows:

1. Graduation from a legally established accredited high school.
2. Recommendation by a high school official.
3. Meet the established class rank and ACT Standard Composite score as set down by the Board of Regents of Wisconsin State Universities.

NOTE: Students not meeting the requirements of Item 3 may attend a summer session at a Wisconsin State University following a prescribed course of study. Students earning a 1.5 grade point average based on a 4 point system during the eight week session would be eligible to enroll for the fall semester.

TRANSFER STUDENTS

Because of the heavy concentration in the highly specialized technical fields, students who plan to transfer to Stout State are strongly encouraged to do so by the beginning of their sophomore year.

A transfer student should request that two copies of a transcript from each institution of higher learning that he has attended be submitted to the Director of Admissions at Stout State University along with the Application for Admission. Transcripts are required even if

the student earned no credits or if he does not desire to transfer any credits. Failure to declare previous attendance at any institution of higher education may result in immediate suspension. Also required is a Personal Reference Request form completed by the Dean of Students or his representative from the last institution attended. This form will be mailed to the applicant following receipt of his Application for Admission.

Credits to be transferred must carry a grade of "C" or better and, of course, must fit into the curriculum which the student has selected at Stout State. Correspondence courses and courses taken in military schools will be evaluated individually. Transfer students whose overall grade point average is below 2.0 (on a 4 point basis) may be admitted on probation if a similar record earned at Stout State would have entitled them to continue.

TECHNICAL INSTITUTE TRANSFER POLICY

- I. Stout State University will accept students from technical institutes
 - A. Following the same procedures now used when evaluating transcripts received from NCA accredited colleges and universities.
 1. Courses in which "D" grades have been earned will not be accepted in transfer.
 2. Courses must be listed on a technical institute transcript. Transcript must be signed by the registrar or a responsible official of the technical institute.
 - B. If the credits earned are part of a major program accredited by the State Board of Vocational, Technical, and Adult Education.
 - C. If they are recommended by a director or responsible technical institute official.
- II. Courses completed as part of a vocational level program will not be accepted in transfer. Students transferring and wishing credit for such courses may be awarded credit only after completion of an examination.
- III. All evaluations (posted on Stout State University transcripts) will include this phrase: "Provisional credit is awarded, to be validated by satisfactory work in residence."
- IV. Credits earned at Vocational, Technical, and Adult Schools accredited by the NCA will be accepted in transfer as they have in the past.

ADULT SPECIAL STUDENTS OR VETERANS

Adults over the age of 21 may be admitted even though they have not completed high school if scholastic success and appropriateness of the offerings of the university are indicated by tests and interviews conducted at the university. Those who expect to enter as adult specials should arrange with the Director of Admissions for such testing and interviewing well in advance of the term for which entrance is desired.

FINANCIAL INFORMATION

FEES

Since the catalog must be prepared far in advance, all fees, room and food rates, and other charges are subject to change without notice in this catalog. Fees are payable at the pre-registration period that precedes each term. Students who do not pay their fees by a stipulated date following the pre-registration period will have their pre-registrations cancelled. They may still register but run the risk of having some classes closed for which they had previously pre-registered. The fee receipt is to be retained by the student. Students are not admitted to classes without this receipt.

WISCONSIN RESIDENT UNDERGRADUATE FEES FOR ONE SEMESTER FOR 1967-68

Incidental Fee	\$119.00
Student Activity Fee (including membership in Student Center)	20.00
Textbook Rental Fee	10.00
Student Center Fee	14.00
	<hr/>
	\$163.00

TUITION

There is no tuition charge for residents of Wisconsin. The tuition for nonresident undergraduates is \$208.00 per semester. A nonresident is defined as any student who has not been a resident of the state for one year preceding his first admission to Stout State University.

GRADUATE FEES

Graduate students pay an additional \$22 for Wisconsin residents and \$48 for nonresidents each semester.

STUDENT ACTIVITY FEE

All students are members of the Stout Student Association. The student activity fee entitles every student of the college to admission to all athletic events, to all concerts given by the student musical organizations, to productions by the dramatic organization, to lyceum and assembly programs sponsored by the college, and to all student dances given under the auspices of the student association. The fee also covers the cost of subscription to The Stoutonia, the student weekly newspaper; The Tower, the college annual; class membership; and membership in the Student Center. The activity fee also covers a portion of the cost of first-aid service and treatment for minor illnesses by the college physician.

STUDENT CENTER FEE

The student center fee is used to pay for the cost of construction of the building and to maintain and operate it.

TEXTBOOK FEE

Textbooks are provided to undergraduate students on a rental basis at the rate of \$10.00 per semester. Details of an optional purchase-rental plan are being formulated.

RESIDENCE HALLS AND FOOD COSTS

Currently the semester charges, if paid in advance, for room and board (21 meals per week) are as follows:

	Residence Hall	Board	Total
Single Room	\$217.00	\$209.00	\$426.00
Double Room	\$153.00	\$209.00	\$362.00

Full payment for room and board is required at time of registration. However, where a hardship would result from complete prepayment, special arrangements may be made to pay by the installment plan. Such a request must be approved by the Dean of Men or the Dean of Women.

The schedule for payment by the installment plan for a double room is as follows:

Date Due	Room	Board	Total
1st week of semester	\$153.00	\$72.00	\$225.00
End of sixth week		\$72.00	\$ 72.00
End of twelfth week		\$72.00	\$ 72.00
			<hr/> \$369.00

The additional charge of \$64 for single room accommodations must be paid with the first installment. A penalty of \$5.00 is assessed for all late payments, whether by semester or by installment.

A \$50.00 room deposit is required on all room reservations at the beginning of the first term. Students cancelling admission to the University prior to July 15 of the Fall Term shall be refunded in full. After July 15, for students cancelling admission or failing to register, the deposit is forfeited.

\$25.00 of the deposit shall be applied against payment in full for a term or the final rental payment. The remaining \$25.00 may be retained as a refundable deposit after assessment of residence hall damage claims or applied against payment in full for a term or the final rental payment.

LABORATORY AND SHOP COSTS

In general, all materials for laboratories and shops are furnished. However, in a few courses the student furnishes material for a project which is to be his own personal property when completed.

PART-TIME STUDENTS

All resident undergraduate students taking 11 or fewer semester hours of credit shall be classified as part-time students. These students shall pay an incidental fee of \$10 per credit (resident) or \$29 per credit (non-resident). The comparable per-credit costs for part-time graduate students are \$17 and \$46.

SPECIAL FEES

Diploma Fee	\$ 7.50
Special Examination Fee (taken in special cases only)	2.00
Late registration	10.00
Commencement regalia rental based on cost.	

REFUNDS ON FEES

- (1.) Semester Basis
 - a. 90% prior to eligibility to start classes
 - b. 80% during first two weeks of class schedule
 - c. 60% during third week of class schedule
 - d. 40% during fourth week of class schedule
 - e. 20% during fifth week of class schedule
 - f. 0% after beginning of sixth week of class schedule
- (2.) Quarter Basis
 - a. 90% prior to eligibility to start classes
 - b. 75% during first two weeks of class schedule
 - c. 50% during third week of class schedule
 - d. 25% during fourth week of class schedule
 - e. 0% after beginning of fifth week of class schedule

In determining withdrawal date, the university uses the date the student notifies the school of the withdrawal; or if the student fails to notify the school and is otherwise unable to verify date of withdrawal, the date of the request to refund should be used to determine the placement on the schedule.

- (3.) Summer Session
 - a. 90% prior to eligibility to start classes
 - b. 75% during first week of class schedule
 - c. 0% after first week of class schedule.
- (4.) Exceptions
 - a. Students who enter military service by enlistment, draft or otherwise shall receive either a full refund of fees or receive course credits for the term.
 - b. Other exceptions to the above may be made upon approval of the President and the designated Board office representative.
 - c. Students who voluntarily withdraw shall be refunded room and board paid in advance on a weekly prorated basis. In all cases, the refund begins on the Monday of the week following withdrawal. Students withdrawing voluntarily shall forfeit the \$50 deposit.
 - d. Students who withdraw for military service or suspended by the school shall be refunded room and board paid in advance on a weekly pro-rated basis including the deposit less any assessment of residence hall damage claims. Other exceptions may be authorized with approval of the designated representative of the University due to extraordinary circumstances.

SCHOLARSHIP STANDARDS

Credit is expressed in semester hours. A credit of one semester hour represents the satisfactory completion of the work of one recitation a week for a period of one semester. A course having five recitations a week will therefore give five semester hours of credit.

In order to receive a degree, the student not only must gain the required number of credits in the course which he is pursuing, but also must attain a certain standard of scholarship. This standard is fixed by grade points as credits. Grade points are apportioned as follows:

- A 4 grade points per semester hour credit—Excellent
- B 3 grade points per semester hour credit—Good
- C 2 grade points per semester hour credit—Average
- D 1 grade point per semester hour credit—Poor
- F 0 grade points per semester hour credit—Failure

A student's grade point average is computed by dividing the number of grade points earned by the number of credits attempted.

Inc. (incompletes) are given only in cases in which the absence incurred has been due to situations over which neither the student nor the instructor has any control. To secure an incomplete, a student must have a passing grade in the course before the absence. A failure will be recorded if the incomplete is not removed within one calendar year.

REQUIREMENTS FOR GRADUATION

The semester credit hours required for graduation vary slightly with the major and are stated under the course of study for each major. Total grade points must be twice the number of semester hours. The normal time required for the completion of these requirements is four years and results in the awarding of the Bachelor of Science or Bachelor of Arts degree. Meeting the requirements for graduation is a responsibility of the student.

The minimum residence requirement is 32 semester hours and 64 grade points to be earned in at least 36 weeks of attendance at Stout State University. The last year of credit must be earned in residence at Stout State University. Candidates for degrees are required to attend the commencement exercises. Registration with the Placement Office is a requirement for graduation.

GRADUATION WITH HONORS

In each graduating class, the selection of students for high distinction and distinction is based upon scholarship. A student must have a minimum grade point of 3.0 and have earned at least 60 semester hours of credit in residence one semester prior to graduation to be considered for honors. The high distinction group is not more than 5% of each of the graduating groups, and the distinction group not more than 10%. These honors are indicated on the commencement program and are made a part of the student's permanent record.

Courses in which grades of "S"—satisfactory—are recorded are not included in the computation of grade points and grade point averages.

MINIMUM SCHOLASTIC REQUIREMENTS

Every student is expected to maintain at least a C average (2.0 grade point average) on all work carried, whether passed or not, in each semester or summer session. Failure to earn this minimum grade point average will result automatically in a status of probation or academic dismissal.

Because determination of probation and dropped status is automatic, as shown below, every student can determine his status at the end of each semester or summer session from his status when the term begins and his grade point average earned during that term.

SCHOLASTIC STANDARDS

1. All undergraduate students whose semester and total grade point averages are C or better are in good standing.
2. Students are placed on probation at end of a semester if semester grade point average is less than "C".
3. Students on scholastic probation are dropped if semester average is less than "C".
4. Students on scholastic probation who earn an average of "C" or better in a semester, but whose total average is less than C, are continued on probation.
5. No student is dropped at the end of the first semester—students are dropped in June only.

REMOVAL FROM PROBATION

Any student on probation will be automatically removed from probation at the end of any semester or summer session in which his total grade point average is at least 2.0.

As a general policy, students are expected to complete courses for which they enroll. However, if a student deems it necessary, after consultation with his instructor and his advisor, to reduce his program he may choose to withdraw from a course before one-third of the meetings have been held (for example, before six weeks have elapsed in the regular session). Upon completion of the proper withdrawal procedure, the registrar will record "W" (withdrawn) on the student's permanent record card, and drop him from the class roll. "W's" will not enter into the calculation of a student's grade point average.

Generally, if a student chooses to withdraw after one-third of the permanent record card and drop him from the class roll. In calculating course has elapsed, the registrar will record "F" (failure) on his grade point averages, "F's" will count as "F's".

In cases of illness or extenuating circumstances, the dean of the school in which the student is majoring, in consultation with the student, his instructor, and his advisor, may authorize the award of "W" in place of "F".

ATTENDANCE POLICY

This policy will apply to all students enrolled at Stout State University:

1. Regular attendance is the responsibility of each student and it is assumed that all students will attend those classes for which they are registered.
2. The attendance policy of each instructor is to be submitted in writing to each class. It may be discussed with or explained to the students. The instructor is urged not to use attendance as a major or fixed factor in the calculation of the student's grade.
3. The responsibility for assignments, experiments, or other class activities carried on during any absence rests with the student.
4. Excuses or notification for student absences will be issued by the Deans of Men and Women under the following circumstances:
 - a. For school sanctioned events such as field trips, athletic contests, and the like.
 - b. For "no-cut" absences covered in Section 5.
 - c. For unusual absences students may seek because of lengthy illness or family situation.
5. Starting with the first hour of the day of dismissal, and ending with the close of classes on the first day of classes immediately following a vacation period, is a span of time classified as "no-cut" days. One negative grade point per class missed will be recorded on the student's total grade points on the permanent record for each reported absence on a "no-cut" day. If the absence is to be excused, the respective Dean will issue the excuse.

SPECIAL PROGRAMS

OVERLOAD POLICY

Students whose total grade point average is 3.5 or better may enroll for a maximum of 20 credits. Students whose grade point is better than 3.0 but less than 3.5 may register for a maximum of 19 credits. Students whose average is 2.5 or better may register for 18 credits. Students whose average is less than 2.5 may register for not more than 17 credits except with special permission of the dean of the appropriate school. It is recommended that a student on probation be advised to carry a reduced program.

INDEPENDENT STUDIES

Special opportunities are provided by some departments for individual study, particularly in those phases of the field of specialization not provided for in formal courses. Through Independent Study, a student may assume a greater responsibility for his own learning than through a formal course. At least 54 clock hours of study are considered necessary for one semester hour of college credit.

The same conditions for registration apply as for any other course. Further information on Independent Study may be obtained in the office of the Vice-President for Academic Affairs or in the offices of the Deans of the Schools.

HONORS COURSES

Several honors courses are offered each year. An honors course is intended for students who present evidence of mastery of basic concepts of the subject. Additional opportunities for enrichment are provided.

EXTENSION SERVICES

The University offers a program of evening and Saturday morning extension classes. Credits earned through enrollment in these off-campus courses are considered as extension credits (not residence). They are transferable to Stout State University on the same basis as they are to other colleges and universities. Registration for these courses are completed at the first class meeting by the University Extended Services Director or by the instructor. Textbooks required for the class by the instructor are made available for purchase at the first class meeting.

Course numbers, titles and content are the same as those offered on the university campus. Courses numbered in the 400's carry either graduate or undergraduate credit and those numbered 500 and above carry graduate credit only.

Students previously matriculated on the Stout State University campus may enroll in off-campus credit courses, provided they are eligible to continue in the University and provided the courses which they wish to take are applicable toward the degree they seek. Undergraduate students who wish to earn Stout State University credit who have not previously matriculated must file a regular application for admission including transcripts from all schools attended to the Director of Admissions office.

Students wishing to earn graduate credit must have filed an "application for admission to the graduate college" and have the registrar of the college awarding their bachelor's degree send a statement to the Stout State University Registrar certifying that they hold a degree. Such students may receive graduate credit but will not be considered master's degree candidates until they meet all other admission requirements.

FIELD EXPERIENCE PROGRAM

Students are encouraged to obtain part of their college education off the Menomonie campus by the Field Experience Program. This program allows a student to receive academic credit for off-campus experiences and study related to their major while employed in an approved field position. This work experience and study is then coordinated with classroom studies by means of group seminars, written reports, supervisor's evaluation, field visitation by faculty members, etc.

Most students use their summers to enroll in this program but part-time employment is also permissible if it fulfills the 320 hours/semester requirement of experience. Most students obtain their own positions which is an educational experience in itself. Lists of potential employers along with other aids to finding and securing field positions are available. Students may repeat the course for credit, but the experience must be in a different organization or progressively more advanced in the same organization. Some students and employers use field experience courses to develop a series of experience in one organization with the student alternating every semester between their field posi-

tion and on-campus studies similar to a standard cooperative education program. Other students desire to change employers every time they participate and therefore obtain a broader off-campus orientation to their major.

Field Experience courses are listed under the course offerings of each department or major. The same conditions for registration apply as for any other course. In addition, approval for a Field Experience course must be obtained from the department chairman of the department offering the course and the Director of Field Experience Programs. Application blanks are available at the Field Experience Office.

UNDERGRADUATE FELLOWS PROGRAM

The faculty at Stout have long recognized that many students' intellectual energies remain untouched by their regular classroom experiences even though their grades remain high. Many times these same students respond most enthusiastically to potential learning experiences when they are not required.

This double problem: the need for intellectual challenge outside the regular classroom and the need for a program without requirements is met at Stout by the Undergraduate Fellows Program, a voluntary program for those students and others who can benefit from voluntary intellectual extracurricular activity. The Program encourages each Fellow to develop his program in four ways: by participating in formal voluntary learning opportunities, by undertaking independent studies in areas which they never contact in the regular curriculum, by developing and following regular reading programs of both professional and leisure material, and by seeking and accepting professional leadership roles.

Hopefully, then the Undergraduate Fellows Program fulfills the four purposes listed in the following excerpt taken from the original proposal:

- a. "To encourage the entire campus to regard learning as an individual, continuous-throughout-life activity not dependent entirely upon instructors, courses, and assignments; motivated by personal purposes rather than grades.
- b. To encourage highly talented students to anticipate high level leadership roles by developing now the perspectives, habits, and attitudes toward continuous learning which they will use after graduating. The perspective being encouraged is 'beyondness'—beyond the curriculum, beyond what one has to learn to get by, and beyond the requirements to hold a specific job.
- c. To offer a voluntary program of preparation for graduate studies at Stout or elsewhere with encouragement to begin planning for the doctorate.
- d. To prevent underachievement among Stout's highly talented students."

AFFILIATION WITH THE MERRILL-PALMER INSTITUTE

Stout State University carries an affiliation with The Merrill-Palmer Institute in Detroit, a private institution with a program devoted to

study of human development and family services.

Sophomore students in any home economics major may make application to study at Merrill-Palmer for a semester starting with the second semester of their junior year. The Dean of the School of Home Economics administers the program with the aid of a faculty committee. This committee selects students eligible for the program on the basis of scholarship and readiness for intensive study in human relationships.

CREDIT FOR INDUSTRIAL WORK EXPERIENCE

Under certain conditions university credit will be granted for experience in industry. In all cases a careful evaluation will be made of the appropriateness of such experience to fulfill degree requirements and vocational objectives. Credit may be awarded for: 1. previous trade or occupational experience; 2. university supervised industrial work assignments; 3. special schools conducted by industry.

1. Previous Trade or Occupational Experience. A maximum of 24 semester hours of technical credit may be earned through examination by those students who have completed an apprenticeship plus three years of successful journeyman occupational experience. Students with less than this amount (7 years) of experience may request examinations in specific technical courses upon presentation of evidence of appropriate work experience in that area.

Students wishing to receive credit for journeyman experience should first present evidence of the required amount of work to the Dean of the School of Applied Science and Technology. Such evidence should be presented shortly after the first enrollment to allow special program consideration. If the work experience is deemed satisfactory by the dean, upon the completion of 60 semester hours of credit, an examination will be arranged as follows:

- a. An advisory examination committee from the trade or occupations will be set up. Agencies to be represented on the advisory examining committee will include the State Board of Vocational and Adult Education, employers in the occupation, employees in the occupation, and Stout State University. The examinations will be conducted at Stout State University and will include oral, written, and performance sections.
 - b. The University will hold examinations to include written work and performance.
 - c. Upon satisfactory completion of such examinations, the advisory committee will be convened for an oral examination. All reasonable expenses for the examination will be borne by the student.
 - d. The examining committee will recommend the amount of credit to be awarded to a maximum of twenty-four semester hours.
2. Special Schools Conducted by Industry. Many manufacturers offer specialized, often short term, technical courses. Some of these are suitable for university credit. The following guidelines are used to award such credit:

- a. The student makes all arrangement with the manufacturer offering the course.
- b. Credit is awarded on the basis of one credit for each full week of attendance.
- c. Students must be enrolled and pay fees at the university prior to taking the course.
- d. Approval by the Coordinator of Cooperative Education will be necessary prior to enrollment for credit.

PHYSICAL FACILITIES

BUILDINGS AND GROUNDS

Seven large, thoroughly equipped buildings, Harvey Hall, Bowman Hall, Ray Hall, Fryklund Hall, the Memorial Student Center, the Pierce Library, and the Health and Physical Education Center comprise the central plant. A heating plant and a maintenance building recently have been added. Plans are now being drawn for a new science-technology building. There are nine residence halls and a central dining facility. The grounds include spacious lawns for the women's dormitories, housing units for married students, practice field, tennis courts, and the Burton E. Nelson Athletic Field. A leased commercial building is in use as an art center. More detailed mention of some of the buildings follows.

THE LIBRARY

The Robert L. Pierce Library has a book collection of over 77,000 volumes, a microfilm collection of 500-odd reels, and currently receives in excess of 750 periodical titles. The greatest strengths of the collection continue to lie in the fields of Stout's historic specializations: home economics, industrial and vocational education. However, a broadening curriculum has required a broadening library collection, numerically and in depth, to support new majors. Most recently, University status puts important new demands on the collection, with the result that it is experiencing a period of unprecedented expansion. The library building, new in 1954, is now overcrowded; an addition is planned, which will approximately triple the area. Occupancy is expected in early 1969.

LABORATORIES AND EQUIPMENT

The shops for the teaching of industrial subjects are well-equipped and modern. Ray Hall is devoted exclusively to shops containing complete equipment for elementary and advanced classes in building construction, woodworking, plastics, and industrial graphics. Bowman Hall contains shops completely equipped for work in printing, power mechanics, and audio-visual aids and photography as well as laboratories and lecture rooms for courses in the arts and sciences. The university carillon is located in the Bowman Hall tower. Fryklund Hall, constructed in 1961, contains metalworking and auto mechanics shops, electrical laboratories, a general shop, the music department, and classrooms.

The home economics laboratories in Harvey Hall are completely modern and well equipped. Laboratories used for home furnishings, child development, food and nutrition, clothing and textiles, home economics education, and the sciences are housed in this building. Adequate lighting and modern furnishings and equipment allow effective instruction in pleasant and comfortable surroundings.

AUDITORIUMS

Two auditoriums provide forums for convocations and student concerts and productions as well as traveling programs and nationally known speakers. One of the wings of Harvey Hall houses a modern auditorium with a seating capacity of 800. The Health and Physical Education Center includes a fieldhouse auditorium which will seat in excess of 3,000.

HOME MANAGEMENT HOUSE

A thoroughly modern and fully equipped home management house provides all conveniences and accommodations desired in buildings of this type. It contains living room, kitchen, laundry, and the director's living quarters in addition to comfortable, well-lighted rooms.

CHILD STUDY CENTER

The Child Study Center offers unique opportunities for observation and participation with preschool children. The center, staffed and directed by the Department of Child Development and Family Life, operates throughout the school year for seminar classes and as a resource center for individual special projects. Faculty offices are also located at the center.

SUMMER SESSION

Each year Stout State University offers twelve weeks of summer school. A two-week pre-session begins immediately after the close of the regular academic year. This is followed by the regular eight-week summer session. A two-week post-session concludes the schedule. Thus, great variety is possible in summer programs.

Credit may be earned at the rate of one semester hour per week's attendance. This makes it possible to earn as much as twelve credits during a summer. Some non-credit workshops are offered but most of the work is in regular courses carrying university credit.

The summer session schedule of classes includes a variety of courses involved with undergraduate degree programs. Because of the large number of graduate students in attendance during the summer, practically all graduate level courses are offered each summer. Several sections of basic graduate courses are usually scheduled for flexibility in programming.

Each summer special workshops are scheduled for various interest groups. Sponsored institutes in special fields are common.

Special lectures and conferences are included in the summer session program. Evening lyceum programs of general interest are available with no admission charge. Specialists in the various major fields of work are often in residence for several days or weeks.

The *Summer Session Bulletin* is published each April. It contains complete information about offerings, class schedules, enrollment procedures, degree programs, and housing. A copy will be sent on request.

COURSES OF STUDY

Major Curricula

(Alphabetical)

Course Descriptions

Applied Science and Technology

Home Economics

Liberal Studies

Education

HOW COURSES ARE NUMBERED

Courses are numbered according to three criteria—the school in which they are offered, the department in which they are offered and the actual course number. The schools and their numbers are: Applied Science and Technology (1), Home Economics (2), Liberal Studies (3), Education (4). Department numbers will be listed after the department heading in the course description section. An example: Fundamentals of Design is offered in the School of Liberal Studies (3) by the art department (04). The individual course number is 106. The course number designation then is 304-106.

THE MAJOR CURRICULA

The major course sequences are on the pages immediately following. They are listed here, however, for your convenience and as a directory. Stout also has a number of minor course sequences. They are listed in the course description section beginning on page 63 with the department in which they are offered.

THE MAJORS:

American Industry Education	Home Economics Education—Plan I
Applied Mathematics	Home Economics Education—Plan II
Art Education	Home Economics—General
Art (Non-Teaching)	Hotel and Restaurant Management
Business Administration	Industrial Education
Clothing and Textiles	Industrial Technology
Dietetics	Manual Arts Therapy
Fashion Merchandising	Marketing and Distributive Education
Food Service Administration	Preschool Education
Home Economics in Business	Psychology
	Technical Education
	Vocational, Trade and Industrial Education

AMERICAN INDUSTRY

(PREPARATION TO TEACH IN SECONDARY SCHOOLS)

GENERAL REQUIREMENTS — BS DEGREE:

Minimum total for graduation	136 credits
Required in Education	20 credits
Required in Technical Work	34 credits
Required in Liberal Studies	61-62 credits
Electives	21-20 credits

1. A major in American Industry with an approved 22-credit minor. These minors are described in the department course description.
2. A double major—American Industry and another recognized major. This option is worked out on an individual basis between the student, his American Industry advisor and the advisor from the second major. The student considering this option should anticipate some additional summer session work and/or an extra semester of work.

The major in American Industry may be elected during the Freshman or Sophomore years and is limited to 30 students per class. Both men and women are encouraged to apply for admission. Students are admitted to the program on the basis of examination, interview, grade point average, and interest in the program. Should a student choose to enter the American Industry program after the Sophomore year, he may do so if he is willing to assume the burden of a considerably lengthened program.

Stout State University is presently involved in the fifth year of a research project concerned with the study of the structure of American

industry, as organized into thirteen major concept areas. These thirteen areas have been identified as communication, transportation, finance, physical facilities, research, procurement, industrial relations, marketing, management, production, materials, processes, and energy. This project is directed to the need for secondary school youth to develop an understanding of those concepts which directly apply to industry. It has received support by grants from the U. S. Office of Education (1963, 1965-1970) and the Ford Foundation (1963-64). The American Industry major has developed from the research of the project.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR	
Course	Credit
102-115, Structures and Concepts	2
102-100A, Interdisciplinary Seminar	0
102-123, Processes I ¹	4
402-205A, Prof. Teacher Education for American Industry .	2
355-109, Algebra, and	4
355-113, Trigonometry	3
OR	
355-150-151, Mathematical Analysis	8
OR	
355-153-154, Calculus and Analytical Geometry	10
366-101, Personal Health, Men	1
367-127, a-b, Physical Education, Men	2
OR	
368-128 a-b, Physical Education, Women	2
326-102 a-b, English Composition ²	6
OR	
326-102 aH-bH, English Composition ²	6
387-309, General Sociology	3
479-123, General Psychology	3
391-106, Fundamentals of Speech	2
000-100, Orientation	0
	<hr/> 32-35
SECOND YEAR	
320-201, General Economics	3
365-101, Philosophy	3
372-421, Physics	5
102-210, Communication	4-2
402-205, B-C Prof. Teacher Education for American Industry	4
102-100, B-C, Interdisciplinary Seminar	0
102-223, Industrial Relationships	2
311-115, Inorganic Chemistry	5
102-214, Transportation	2
304-106, Fundamentals of Design	3
Elective	3-5
	<hr/> 34

THIRD YEAR	
Course	Credit
360-153a, Music Appreciation ^a	2
375-311, Government	3
150-290, Industrial Organization	2
391-340, Contemporary Theater ^a	2
402-205, D-E, Prof. Teacher Education for American Industry ⁴	4
102-100, D-E, Interdisciplinary Seminar	0
102-310, Materials	2
326- , Literature	3
150-300, Production Management	3
Elective	13

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FOURTH YEAR	
308-122, Biology	3
304-390, Modern Art	3
OR	
304-332, Design	3
338-410, Modern World	3
309-330, Principles of Marketing	3
402-205 F, Prof. Teacher Education for American Industry	2
449-408, Student Teaching	8
102-100 F, Interdisciplinary Seminar	0
102-402, Physical Facilities	2
102-438, Energy	2
102-423, Processes II ⁵	1
102-412, Production Lab	2
102-417, Finance	2
Elective	3-4

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ONE SUMMER:

102-197, 297, 397, 497 Field Experience	2
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¹Drafting (148-101), metalworking (157-102), printing (137-117), and woodworking (196-103) will be accepted in lieu of Processes I. Students completing these courses will take Processes II (102-423) and a 2-credit course in Communication in place of the 4-credit Communication course.

²Students must meet proficiency requirements for entry into teacher education.

³The courses Music Appreciation (360-153a) and Contemporary Theater (397-340) will be waived where suitable previous work has been taken. Elective credit must be taken in their place.

⁴At the time students enter 102-205D they must have a 2.25 Grade Point Average and maintain it through 102-408. Furthermore, at this time they must show evidence of having passed a physical examination, and proficiency in Speech and English.

⁵Not required of students who take Processes I.

APPLIED MATHEMATICS

GENERAL REQUIREMENTS — BS DEGREE:

Total for Graduation	130 credits
Required in mathematics	31-34 semester hours
Required in applied mathematics	16-19 semester hours
<hr/>	
Total, all mathematics courses	47-50 semester hours
Required in a related core	20-23 credits
Required in Liberal Studies	60 credits

The role of mathematics in our highly scientific-technological society is basic and essential. Mathematics is increasingly recognized as a valued tool in more and more areas of human endeavor. The rise in the demand by industry and business for people with strong mathematical preparation has been rapid and significant.

The program in applied mathematics provides a strong foundation in academic mathematics essential to application and to possible graduate study. The applied mathematics core includes the study of mathematical model development, computer science, and statistics—three areas most common in industry and business. Related courses, selected under advisement according to individual interests from Stout's unique industrial and business offerings, provide an orientation to these major forces in our culture. A core of liberal studies rounds out the undergraduate program.

Following is a suggested yearly sequence of courses. Students qualifying for advanced placement or honors courses will make the appropriate substitutions in the requirements listed.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR	
Course	Credit
355-156, 157, Calculus and Analytic Geometry	10
354-141, Digital Computer Programming	2
326-102 a-b, English Composition	6
367-127 a-b, 368-128 a-b, Physical Education	2
479-123, General Psychology	3
Related core elective	2
Science (Liberal Studies) electives	8
SECOND YEAR	
355-255, Differential Equations	3
355-265, Modern Geometry	
OR	
Mathematics elective	3
355-275, Linear Algebra	3
366-101, Personal Health	1
391-106, Fundamentals of Speech	2
320-110, a-b, Principles of Economics I and II	6
Applied Mathematics elective	2
Related core electives	4
Science Electives	8

THIRD YEAR	
Course	Credit
355-350, 351, Real Analysis	6
355-331, Probability Theory	3
354-332, Mathematics Statistics	3
Related core electives	8
Art of music electives	4
Social Science electives	3
English electives (including 3 semester hours of literature)	6

FOURTH YEAR	
355-470, Modern Algebra	3-6
354-490, 491, Mathematical Models	4
Applied Mathematics electives	5-8
Related core electives	6-9
Social Science elective	3
Liberal Studies electives (exclusive of mathematics)	8

ART (Education)

GENERAL REQUIREMENTS — BS DEGREE:

Completion of a minimum of 130 semester hours.

Liberal Studies courses: minimum of 56 semester hours.

Professional education courses: minimum of 20 semester hours.

A broadfield major in art: minimum of 54 semester hours.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR	
Course	Credit
326-102 a-b, English Composition	6
391-103, Fundamentals of Speech	2
367-127 a-b, 368-128 a-b, Physical Education	2
304-200, Drawing	3
304-401, Drawing	3
304-410, Ceramics	3
304-411, Ceramics	3
304-390, Modern Art	3
Liberal Studies Requirement	3
Science or Math Core or Equivalents	4 or 5

SECOND YEAR	
Art History Elective	6
304-300, Painting (or)	
304-320, Sculpture	3
304-402, Painting (or)	
304-403, Sculpture (continue in area taken during first semester) ..	3
304-440, Art Metal	3
304-441, Art Metal	3
326-250, Greek and Hebrew Literature in Translation	3
Liberal Studies Requirement	11-13

THIRD YEAR	
Course	Credit
304-300, Painting (or)	
304-320, Sculpture	3
304-402, Painting (or)	
304-403, Sculpture	3
304-451, Printmaking	3
304-452, Printmaking	3
421-222, Principles of Secondary Education	2
304-420, Life Drawing	3
479-303, Educational Psychology	2
Art History Elective	3
Art Electives	3
Liberal Studies Requirement	9
FOURTH YEAR	
405-302, Introduction to Teaching Art in Elementary Schools	3
405-307, Introduction to Teaching Art in Secondary Schools	3
405-434, Curriculum Development for Art	2
405-408, Student Teaching	8
304-498, Esthetics	3
Art Electives	9
Liberal Studies Elective	5

ART (Non-Teaching)

GENERAL REQUIREMENTS — BS DEGREE:

Completion of a minimum of 132 semester hours.

Liberal Studies courses: minimum of 68 semester hours.

Art courses: minimum of 64 semester hours.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR	
Course	Credit
326-102 a-b, English Composition	3
391-106 Fundamentals of Speech	2
367-127 a-b, 368-128 a-b, Physical Education	2
304-200 Drawing	3
304-401 Drawing	3
304-410 Ceramics	3
304-411 Ceramics	3
Science or Math Core or Equivalents	4-5
304-390 Modern Art	3
Liberal Studies Requirement	3
SECOND YEAR	
Art History Electives	6
304-300 Painting (or)	
304-320 Sculpture	3
304-402 Painting (or)	
304-403 Sculpture (continue in area taken first semester)	3

Course	Credit
304-440 Art Metal	3
304-441 Art Metal	3
326-250 Ancient Literature in English Translation	3
Liberal Studies Requirements	11-13

THIRD YEAR

304-300 Painting (or)	
304-320 Sculpture	3
304-402 Painting (or)	
304-403 Sculpture	3
304-451 Printmaking	3
304-452 Printmaking	3
304-420 Life Drawing	3
304-421 Life Drawing	3
Art History Elective	6
Art Elective	3
Liberal Studies Requirements	7-8

FOURTH YEAR

304-498 Esthetics	3
Art Electives	16
Liberal Studies Requirements	11

BUSINESS ADMINISTRATION (General)

GENERAL REQUIREMENTS — BS DEGREE:

1. Total for graduation 130 credits
 Required in Liberal Studies 60 credits
 Basic Business Administration Requirements 15 credits
 Business Administration 48 credits
 Electives 7 credits
2. Students are urged to obtain work experience related to Business Administration. The Field Experience Program is described on p. 20.
3. Electives in Business Administration should be organized so as to provide some concentration in an area of interest.
4. The student must fulfill the English adequacy and speech proficiency requirements prescribed by the respective departments.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR

Course	Credit
326-102 a-b, English Composition	6
Mathematics	4
366-101, Personal Health	1
Science (Biology, Chemistry, Physics, or a combination)	8
367-127, or 368-128, Physical Education	2
479-123, General Psychology	3
391-106, Fundamentals of Speech	2
Arts (Art, Music, or Theater Art)	6

SECOND YEAR		
Course		Credit
Additional English		6
Social Science (selected from at least 3 of the following disciplines: anthropology, geography, history, sociology, political science. At least 3 credits in history must be included.)		12
309-206a, 206b, Principles of Accounting		6
320-110a, 110b, Principles of Economics		6
Additional Mathematics		3
THIRD YEAR		
309-330, Principles of Marketing		3
309-304, Principles of Business Organization		3
309-325, Business Statistics		3
309-340, Business Finance		3
309-318, Business Law		3
Electives*		18
FOURTH YEAR		
320-360, Intermediate Economic Analysis		3
320-450, Managerial Economics		3
309-435, Managerial Accounting		3
309-450, Regulation of Industry		3
309-490, Administrative and Business Policies		3
Electives		17
* Electives include 18 credits in Business Administration, 10 credits in Liberal Studies, and 7 credits in any area.		

CLOTHING AND TEXTILES

To obtain the beginning academic preparation for teaching and research on the university level; to enter industry as a textile representative, consumer consultant, research technician, or decorative fabric designer.

GENERAL REQUIREMENTS — BS DEGREE:

1. Total for graduation 128 credits
 Required in Liberal Studies 44-48 credits
 Required in Home Economics 49-51 credits
 Electives 28-37 credits

Completion of electives by the following options may be used:

- (a) One 22-credit minor. Suggested minors: Art, Biology, Chemistry, English, Journalism, Psychology, Sociology or Speech.
 - (b) Two 15-credit concentrations. See end of Curricula section for listing.
2. The student must fulfill the English adequacy and speech proficiency requirements prescribed by the respective departments.
 3. Work experience may be obtained through participation in the Field Experience program.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR

Course	Credit
000-100 Orientation	0
214-108 Clothing in a Contemporary World	3
214-118* Clothing Construction	3
229-114 Food Science I	4
304-106 Fundamentals of Design	3
308-122 Biology	3
308-214 Physiology and Anatomy	3
326-102a-b English Composition	6
368-128a-b Physical Education	2
391-106 Fundamentals of Speech	2
479-123 General Psychology	3
Electives	0-3
	<hr/> 32

SECOND YEAR

212-124 Child Development	3
214-215 Textiles I	3
214-218 Advanced Clothing Construction	3
229-212 Nutrition	3
304-334 Interior Design	3
311-115 Inorganic Chemistry	5
320-201 General Economics	3
326-348, 350, 360, 400a or 400b Literature	3
Electives	6
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THIRD YEAR

212-349 Relationships in the Democratic Family	3
214-313 Flat Pattern Design —or—	2
214-412 Draping	(3)
214-407 Textiles II	2
214-411 Decorative Fabrics	2
214-471 History of Costume: Ancient to European 1900 —or— ..	3
214-475 History of American Costume	(2)
244-317 Consumer Economics	3
326-346 Expository Writing —or—	3
326-410 Writing and Selling Feature Articles	(2)
387-309 General Sociology	3
Electives	9-12
	<hr/> 32

FOURTH YEAR

214-473 Clothing and Textiles Industry	3
214-480 Social-Psychological Aspects of Clothing	3
214-482 Clothing and Textiles Problems	2
244-403 or 403R Home Management	4
338-202a-b Western Civilization —or—	6

Course	Credit
338-407 History of Americas —or—	(3)
338-410 Modern World	(3)
Electives	13-16

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* Pretest to determine need. If 214-118 is bypassed, take 212-124 Child Development in the freshman year instead.

DIETETICS

To provide the academic background for a career as a therapeutic dietitian, administrative dietitian or nutrition educator.

GENERAL REQUIREMENTS — BS DEGREE:

1. Total for graduation 128 credits
 Required in Liberal Studies 62 credits
 Required in Home Economics 46 credits
 Electives 20 credits
 Electives should be selected to meet the requirements for two 15-credit concentrations, or one 22-credit minor as listed under course descriptions of each department, and as free electives. See concentration listing at end of curricula section.
2. The student must fulfill the English adequacy and speech proficiency requirements prescribed by the respective departments.
3. Work experience may be obtained through participation in the Field Experience Program.
4. A cumulative grade point average of 2.00 is required in the following key courses: 308-122, 308-214, 308-306, 311-115, 311-208, 229-114, 229-212, 229-230, for a student to be admitted to candidacy in the Dietetics major.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR

Course	Credit
000-100 Orientation	0
212-124 Child Development	3
214-108 Clothing in a Contemporary World	3
229-114 Food Science I	4
304-106 Fundamentals of Design	3
308-122 Biology	3
308-214 Physiology and Anatomy	3
326-102a-b English Composition	6
368-128a-b Physical Education	2
391-106 Fundamentals of Speech	2
479-123 General Psychology	3

32

SECOND YEAR

Course	Credit
214-215 Textiles I	3
229-212 Nutrition	3
229-230 Food Science II	3
308-306 Bacteriology	3
311-115 Inorganic Chemistry	5
311-208 Organic Chemistry	4
320-201 General Economics	3
326-348, 350, 360, 400a or 400b Literature . . .	3
Electives	5
	<hr/> 32

THIRD YEAR

212-349 Relationships in the Democratic Family	3
229-308 Meal Management	3
229-328 Food Service Administration	3
308-362 Advanced Physiology	3
311-322 Biochemistry	3
326-346 Expository Writing	3
387-309 General Sociology	3
479-303 Educational Psychology	2
Electives	9
	<hr/> 32

FOURTH YEAR

229-310 Nutrition and Dietetics	3
229-418 Diet Therapy	3
229-438 Experimental Foods	3
229-452 Quantity Food Production and Service .	3
229-454 Institution Food Purchasing .	2
244-403 or 403R Home Management .	4
309-206a Elementary Accounting .	3
442-320 Methods of Teaching Home Economics	2
479-435 Personnel Management ..	3
Electives	6
	<hr/> 32

FASHION MERCHANDISING

To prepare for fashion consulting, consumer counseling, retail buying and advertising in the merchandising of clothing.

GENERAL REQUIREMENTS — BS DEGREE:

1. Total for graduation 128 credits
 Required in Liberal Studies 58-62 credits
 Required in Home Economics 49-55 credits
 Electives 11-24 credits
 Completion of electives may be by choice of free electives.
2. The student must fulfill the English adequacy and speech proficiency requirements prescribed by the respective departments.
3. Work experience may be obtained through participation in the Field Experience program.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR		Credit
Course		
000-100 Orientation		0
212-124 Child Development		3
214-108 Clothing in a Contemporary World		3
214-118* Clothing Construction		3
229-114 Food Science I		4
304-106 Fundamentals of Design		3
308-122 Biology		3
326-102a-b English Composition		6
368-128a-b Physical Education		2
391-106 Fundamentals of Speech		2
479-123 General Psychology		3
Electives		0-3
		32

SECOND YEAR		
214-215 Textiles I		3
214-218 Advanced Clothing Construction		3
229-212 Nutrition		3
304-334 Interior Design		3
309-206a Principles of Accounting		3
311-115 Inorganic Chemistry		5
320-201 General Economics		3
326-348, 350, 360, 400a or 400b Literature		3
387-309 General Sociology —or—		
387-420 Introduction to Cultural Anthropology		3
Electives		3
		32

THIRD YEAR		
212-349 Relationships in the Democratic Family		3
214-313 Flat Pattern Design —or—		(2)
214-412 Draping		3
214-325 Fashion Merchandising		3
214-471 History of Costume: Ancient to European 1900 —or—		3
214-477 History of American Costume —or—		(2)
214-480 Social-Psychological Aspects of Clothing		(3)
244-317 Consumer Economics		3
309-330 Principles of Marketing		3
326-346 Expository Writing —or—		3
326-410 Feature Writing		(2)
330-101a-b French		8
Electives		3-6
		32

FOURTH YEAR		
214-197, 297, 397, 497 Field Experience		2-6
214-411 Decorative Fabrics		2
214-450 Tailoring		3
214-473 Clothing and Textiles Industry		3

244-403 or 403R Home Management ..	4
338-202a-b Western Civilization —or— ..	(6)
338-407 History of Americas —or— ..	(3)
338-410 Modern World ..	3
479-435 Personnel Management ..	3
Electives ..	5-12

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* Pretest to determine need.

FOOD SERVICE ADMINISTRATION

To provide the academic background for a career as administrator in large quantity food services, such as restaurants, hotels, motels, dormitories and school lunch programs.

GENERAL REQUIREMENTS — BS DEGREE:

1. Total for graduation 128 credits
 Required in Liberal Studies 77 credits
 Required in Home Economics 35 credits
 Electives 16 credits
 Electives should be selected to meet the requirements for two 15-credit concentrations, or one 22-credit minor as listed under course descriptions of each department, and as free electives. See concentration listings at end of curricula section.
2. The student must fulfill the English adequacy and speech proficiency requirements prescribed by the respective departments.
3. Work experience may be obtained through participation in the Field Experience Program.
4. A cumulative grade point average of 2.00 is required in the following key courses: 308-122, 308-214, 308-306, 311-115, 311-208, 229-114, 229-212, 229-230, for a student to be admitted to candidacy in the Food Service Administration major.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

Course	FIRST YEAR	Credit
000-100 Orientation ..		0
212-124* Child Development ..		3
214-108* Clothing in a Contemporary World ..		3
229-114 Food Science I ..		4
304-106 Fundamentals of Design ..		3
308-122 Biology ..		3
308-214 Physiology and Anatomy ..		3
326-102a-b English Composition ..		6
367-127a-b or 368-128a-b Physical Education ..		2
391-106 Fundamentals of Speech ..		2
479-123 General Psychology ..		3

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SECOND YEAR	
Course	Credit
214-215 Textiles I	3
229-212 Nutrition	3
229-230 Food Science II	3
308-306 Bacteriology	3
311-115 Inorganic Chemistry	5
311-208 Organic Chemistry	4
326-348, 350, 360, 400a or 400b Literature	3
355-109 College Algebra	4
355-113 Trigonometry	3
Electives	2
	<hr/> 33
THIRD YEAR	
229-308 Meal Management	3
229-328 Food Service Administration	3
229-452 Quantity Food Production and Service	3
309-206a Principles of Accounting	3
320-201 General Economics	3
326-346 Expository Writing	3
372-421 Physics	5
387-309 General Sociology	3
Electives	6
	<hr/> 32
FOURTH YEAR	
229-454 Institution Food Purchasing	2
229-455 Food Service Equipment	2
229-475 Advanced Food Production Management	3
309-318 Business Law	3
309-401 Advanced Accounting	3
338-407 History of Americas —or—	
338-410 Modern World	3
354-130 Computational Statistics	2
354-141 Digital Computer Programming	2
479-435 Personnel Management	3
Electives	8
	<hr/> 31

* Or elective for men.

HOME ECONOMICS IN BUSINESS

To prepare to work in business for utility companies, foods publications, radio and TV programming, and test kitchen work.

GENERAL REQUIREMENTS — BS DEGREE:

1. Total for graduation	128 credits
Required in Liberal Studies	69 credits
Required in Home Economics	46 credits
Electives	13 credits

Completion of electives by the following options may be used:

- (a) One 22-credit minor.
 - (b) Two 15-credit concentrations. See concentration listings at end of curricula section.
 - (c) Free electives.
2. The student must fulfill the English adequacy and speech proficiency requirements prescribed by the respective departments.
 3. Work experience may be obtained through participation in the Field Experience program.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR		
Course		Credit
000-100 Orientation		0
212-124 Child Development		3
214-108 Clothing in a Contemporary World		3
214-118* Clothing Construction —or—		
304-106 Fundamentals of Design		3
229-114 Food Science I		4
308-122 Biology		3
308-214 Physiology and Anatomy		3
326-102a-b English Composition		6
368-128a-b Physical Education		2
391-106 Fundamentals of Speech		2
479-123 General Psychology		3
SECOND YEAR		32
214-118* Clothing Construction —or—		
304-106 Fundamentals of Design		3
214-215 Textiles I		3
229-212 Nutrition		3
229-230 Food Science II		3
311-115 Inorganic Chemistry		5
311-208 Organic Chemistry		4
320-201 General Economics		3
326-306 Journalism		2
326-346 Expository Writing		3
326-348, 350, 360, 400a or 400b Literature		3
THIRD YEAR		32
212-349 Relationships in the Democratic Family		3
229-300 Applied Institution Management		3
229-308 Meal Management		3
244-317 Consumer Economics		3
244-333 Home Equipment and Household Physics		3
244-400 Demonstration Techniques		2
308-306 Bacteriology		3
326-410 Writing and Selling Feature Articles		2
326-425 Copy Editing and Preparation		2
387-309 General Sociology		3
Electives		5
		32

FOURTH YEAR	
Course	Credit
229-438 Experimental Foods	3
244-403 or 403R Home Management	4
309-330 Principles of Marketing	3
326-415 Technical Writing for Home Economics	3
338-407 History of Americas —or—	
338-410 Modern World	3
391-470 Television Programming and Performance	3
421-479 Public Relations	2
479-435 Personnel Management	3
Electives	8

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* Pretest to determine need.

HOME ECONOMICS EDUCATION —

PLAN I

Broadfield major of 55 semester hours in home economics and art with no minor.

To prepare to teach in secondary schools, in home economics related adult education programs, and in the Cooperative Extension Service.

GENERAL REQUIREMENTS — BS DEGREE:

1. Total for graduation .. 128 credits
 - Required in Liberal Studies .. 39 credits
 - Required in Professional Education .. 24 credits
 - Required in Home Economics and Art .. 55 credits
 - Electives .. 10 credits

Free electives should be selected from social science, physical sciences, humanities, home economics, industrial education and education courses.

No more than a total of six elective credits may be selected in home economics and art.

2. The student must fulfill the English adequacy and speech proficiency requirements as described in the Professional Education section of Course Descriptions.
3. Work experience may be obtained through participation in the Field Experience Program.
4. Application for the teacher education program must be made by the second semester of the second year. In order to qualify for student teaching, candidates must hold a cumulative grade point average of 2.25.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR	
Course	Credit
000-100 Orientation	0
212-124 Child Development	3
214-108 Clothing in a Contemporary World	3
214-118* Clothing Construction —or—	
304-106 Fundamentals of Design	3
229-114 Food Science I	4
308-122 Biology	3
308-214 Physiology and Anatomy	3
326-102a-b English Composition	6
368-128a-b Physical Education	2
391-106 Fundamentals of Speech	2
479-123 General Psychology	3
	<hr/> 32
SECOND YEAR	
212-248 Family Health	2
214-118* Clothing Construction —or—	
304-106 Fundamentals of Design	3
214-215 Textiles I	3
214-218 Advanced Clothing Construction	3
229-212 Nutrition	3
304-206 Introduction to Art	2
311-115 Inorganic Chemistry	5
320-201 General Economics	3
326-348, 350, 360, 400a or 400b Literature	3
421-222 Principles of Secondary Education	2
479-303 Educational Psychology	2
	<hr/> 31
THIRD YEAR	
212-264 Child Guidance	2
212-349 Relationships in the Democratic Family	3
229-230 Food Science II	3
229-308 Meal Management	3
244-317 Consumer Economics	3
244-333 Home Equipment and Household Physics	3
304-334 Interior Design	3
326-346 Expository Writing	3
387-309 General Sociology	3
442-304 Introduction to Teaching Home Economics	3
Electives	3
	<hr/> 32
FOURTH YEAR	
244-403 or 403R Home Management	4
244-428 Family Finance	2
338-407 History of Americas —or—	
338-410 Modern World	3
Electives	7
Teaching Block**	

421-401 Introduction to Guidance and Counseling	2
421-402 Principles of Vocational, Technical and Adult Education	2
442-404 Curriculum Development	5
442-408 Student Teaching —or—	
442-488 Intern Teaching	8

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* A placement test in clothing will determine whether 214-118 is needed.

** Student teaching may be taken either semester of the senior year. In order that the student may be free to teach in an off-campus school during second quarter of the semester, the courses starred above must be taken concurrently.

HOME ECONOMICS EDUCATION —

PLAN II

A major of 42 semester hours in Home Economics and Art and a minor of 22 semester hours in the following teaching minors: biology, chemistry, English, history, mathematics, safety education, sociology, and speech; or the following non-teaching minors: journalism, physics, and psychology; or minors listed under the course description of each department.

To prepare to teach in secondary schools, in home economics related adult education programs, and in the Cooperative Extension Service.

GENERAL REQUIREMENTS — BS DEGREE:

1. Total for graduation 128 credits
 Required in Liberal Studies 36-42 credits
 Required in Professional Education 24 credits
 Required in Home Economics and Art 42-45 credits
 Electives 20-23 credits
 Electives should be selected to fulfill the 22-credit minor.
2. The student must fulfill the English adequacy and speech proficiency requirements as described in the Professional Education section of Course Descriptions.
3. Work experience may be obtained through participation in the Field Experience Program.
4. Application for the teacher education program must be made by the second semester of the second year. In order to qualify for student teaching, candidates must hold a cumulative grade point average of 2.25.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

Course	FIRST YEAR	Credit
000-100 Orientation		0
212-124 Child Development		3

Course	Credit
214-108 Clothing in a Contemporary World	3
214-118* Clothing Construction —or—	
304-106 Fundamentals of Design	3
229-114 Food Science I	4
308-122 Biology	3
308-214 Physiology & Anatomy	3
326-102a-b English Composition	6
368-128a-b Physical Education	2
391-106 Fundamentals of Speech	2
479-123 General Psychology	3
	<hr/> 32

SECOND YEAR

212-248 Family Health	2
214-118* Clothing Construction —or—	
304-106 Fundamentals of Design	3
214-215 Textiles I	3
229-212 Nutrition	3
311-115 Inorganic Chemistry	5
320-201 General Economics	3
326-348, 350, 360, 400a or 400b Literature	3
421-222 Principles of Secondary Education	2
479-303 Educational Psychology	2
Minor or elective	6
	<hr/> 32

THIRD YEAR

212-264 Child Guidance	2
212-349 Relationships in the Democratic Family	3
214-218 Advanced Clothing Construction or elective	3
229-308 Meal Management	3
244-317 Consumer Economics	3
304-334 Interior Design	3
326-346 Expository Writing	3
387-309 General Sociology	3
442-304 Introduction to Teaching Home Economics	3
Minor or electives	6
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FOURTH YEAR

244-403 or 403R Home Management	4
338-407 History of Americas —or—	
338-410 Modern World	3
Minor or electives	8
Teaching Block**	
421-401 Introduction to Guidance and Counseling Guidance	2
421-402 Principles of Vocational, Technical & Adult Education	2
442-404 Curriculum Development	5
442-408 Student Teaching —or—	
442-488 Intern Teaching	8
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* A placement test in clothing will determine whether 214-118 is needed.

** Student teaching may be taken either semester of the senior year. In order that the student may be free to teach in an off-campus school during second quarter of the semester, the courses starred above must be taken concurrently.

HOME ECONOMICS — GENERAL

To prepare to work with the Extension Service, utility companies, and welfare agencies.

GENERAL REQUIREMENTS — BS DEGREE:

1. Total for graduation 128 credits
 - Required in Liberal Studies 47 credits
 - Required in Home Economics 53 credits
 - Electives 28 credits
 Completion of electives by the following options may be used:
 - (a) One 22-credit minor.
 - (b) Two 15-credit concentrations. See listing at end of curricula section.
 - (c) Free electives.
2. The student must fulfill the English adequacy and speech proficiency requirements prescribed by the respective departments.
3. Work experience may be obtained through participation in the Field Experience program.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR	
Course	Credit
000-100 Orientation	0
212-124 Child Development	3
214-108 Clothing in a Contemporary World	3
214-118* Clothing Construction —or—	
304-106 Fundamentals of Design	3
229-114 Food Science I	4
308-122 Biology	3
308-214 Physiology & Anatomy	3
326-102a-b English Composition	6
368-128a-b Physical Education	2
391-106 Fundamentals of Speech	2
479-123 General Psychology	3
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SECOND YEAR	
212-248 Family Health	2
214-118* Clothing Construction —or—	
304-106 Fundamentals of Design	3
214-215 Textiles I	3

Course	Credit
214-218 Advanced Clothing Construction	3
229-212 Nutrition	3
311-115 Inorganic Chemistry	5
320-201 General Economics	3
326-348, 350, 360, 400a or 400b Literature	3
Electives	7

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THIRD YEAR

212-264 Child Guidance	2
212-349 Relationships in the Democratic Family	3
229-308 Meal Management	3
244-317 Consumer Economics	3
304-334 Interior Design	3
326-346 Expository Writing	3
387-309 General Sociology	3
H. E. Electives**	6
Electives	7

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FOURTH YEAR

244-403 or 244-403R Home Management	4
244-428 Family Finance	2
308-442 Community Hygiene	2
338-407 History of Americas —or—	
338-410 Modern World	3
H. E. Electives**	6
Electives	14

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* Pretest to determine need.

** Six additional credits in each of two of the following areas: Child Development and Family Life, Clothing and Textiles, Food Science and Nutrition, or Home Management and Family Economics.

HOTEL AND RESTAURANT MANAGEMENT MAJOR

A new program leading to a Bachelor of Science degree in Hotel and Restaurant Management is being offered by the School of Home Economics. The purpose of this program is to prepare students for management positions in the hotel, motel, restaurant and other resort operations related to the hospitality field. It is being established with the cooperation of the tourist industry in Wisconsin and other states in the north central region.

Students receive a broad education in liberal studies. Concentration of courses are offered in the area of business administration so that graduates will be prepared to serve in executive and managerial positions with specialized knowledge concerned with the hotel, restaurant and resort professions.

GENERAL REQUIREMENTS — BS DEGREE:

1. Total for graduation128 credits
 - Required in Liberal Studies 53 credits
 - Required in Hotel and Restaurant 36 credits
 - Required in Business Administration 24 credits
 - Required in Home Economics 4 credits
 - Electives 15 credits

Electives should be selected to meet the requirements for two 15-credit concentrations, or one 22-credit minor as listed under course descriptions of each department, and as free electives. See concentration listings at end of curricula section.
2. The student must fulfill the English adequacy and speech proficiency requirements prescribed by the respective departments.
3. All students are required to work a total of three 12-week periods, 40 hours a week, in approved jobs during summer months or the academic year. The student must write a report on his work experience and a letter from the industry supervisor detailing work performance for each 12-week period is required. No academic credit is received for the work experience but successful completion of 36 weeks of work is a requirement for graduation.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR

Course	Credit
245-101 Introduction to Hotel and Restaurant Management	3
229-114 Food Science I	4
311-115 Inorganic Chemistry	5
320-110a-b Principles of Economics	6
326-102a-b English Composition	6
367-127a-b Physical Education	2
391-106 Fundamentals of Speech	2
479-123 General Psychology	3
	<hr/>
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SECOND YEAR

245-205 Maintenance and Sanitation	3
245-210 Purchasing for Hotel and Restaurant	3
304-106 Fundamentals of Design	3
309-206a-b Principles of Accounting	6
309-304 Principles of Organization	3
309-330 Principles of Marketing	3
338-407, 410 History of America or Modern World	3
355-109 College Algebra	4
Electives (Business)	3
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THIRD YEAR	
Course	Credit
245-301 Accounting	3
245-305 Hotel and Restaurant Management	3
245-310 Quantity Food Production	3
245-315 Food and Beverage Control	3
245-316 Merchandising and Sales	3
309-318 Business Law	3
309-325 Business Statistics	3
326-346 Expository Writing	3
387-309 General Sociology	3
Electives	6
	<hr/> 33
FOURTH YEAR	
245-318 Facilities Planning and Layout	3
245-320 Catering	3
245-321 Food Production Management	3
245-330 Seminar	3
309-340 Business Finance	3
326-348, 350, 400a or 400b Literature	3
320-414 Labor Economics	3
479-435 Personnel Mgt.	3
Electives	9
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INDUSTRIAL ARTS EDUCATION

(Preparation to Teach in Secondary Schools)

GENERAL REQUIREMENTS — BS DEGREE:

1. Total for graduation 130 credits
 Required in Liberal Studies 51-52 credits
 Required in Education 22 credits
 Required in Technical Work 42 credits
 Electives in Liberal Studies and/or Education 14-15 credits
 Completion of one of the following options (elective credits in Liberal Studies and Education will be used to complete this requirement):
 - (a) A 42 credit major in Industrial Education with one 22 credit Liberal Studies minor (see list of minors by departments beginning on page 86).
 - (b) A broad field Major in Industrial Education consisting of 42 credits of technical work with two 15-credit Liberal Studies concentrations (see list of academic concentrations on page 61).
2. Work experience related to a concentration may be obtained through participation in the Field Experience Program (see page 20).
3. Students qualifying for Advanced Placement, Independent Studies, or Honor courses will make appropriate substitutions in the requirements listed.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR

Course	Credit
326-102a-b English Composition	6
391-106 Fundamentals of Speech	2
355-109 College Algebra	4
355-113 Trigonometry	3
OR	
355-150-151 Mathematical Analysis	8
479-123 General Psychology	3
387-309 General Sociology	3
367-127 Physical Education (ab)	2
367-101 Personal Health	1
148-101 Drafting	2
157-102 Metals	2
137-117 Introduction to Graphic Arts	2
196-103 Woodworking	2
000-100 Orientation	0

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SECOND YEAR

326-346 Expository Writing	3
311-115 Inorganic Chemistry	5
320-201 General Economics	3
391-223 Essentials of Public Speaking	2
421-222 Principles of Secondary Education	2
479-303 Educational Psychology	2
176-202 Power Mechanics	2
196-203 Plastics	2
124-208 Electricity	2
150-290 Industrial Organization	2
Technical Electives ¹	4
Electives in Liberal Studies or Education ²	4

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THIRD YEAR

372-421 Physics—Electricity, Heat, Mechanics	5
375-311 Government	3
449-304 Introduction to Teaching ²	3
Technical Electives ¹	14
Additional Science Elective	
384-423, 372-425, 311-436, 311-445	3
Electives in Liberal Studies and Education ²	5

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FOURTH YEAR

338 History Elective	3
388-407, 338-101a, or 338-410	5
449-404 Curriculum Development	2
421-401 Introduction to Guidance and Counseling	2
449-408 Student Teaching —or—	

449-488 Intern Teaching	8
Technical Electives ¹	8
Electives in Liberal Studies or Education ²	5-6
	<hr/>
	31-32
Total	130

¹Technical electives will be selected in terms of area of technical concentration chosen.

²Electives will be chosen to complete one of two options. After option is complete electives may be used for *either* Liberal Studies or Education.

³Students must make application for admission to the Education sequence at this point. Candidates must hold a cumulative grade point average of at least 2.25 and meet the speech and English proficiency requirement as described in the Professional Education section of course descriptions.

INDUSTRIAL TECHNOLOGY

(Preparation for work in Industry)

GENERAL REQUIREMENTS — BS DEGREE:

1. Total for graduation 130 credits
 Required in Liberal Studies 48-49 credits
 Required in Professional 46-50 credits
 Electives 32-35 credits
 - a. Technical (Applied Science and Technology) Minimum of 16 credits
 - b. Non-Technical Minimum of 11 credits
2. Electives should be selected to fulfill requirements for a specific concentration in Industrial Technology.
3. Work experience related to a Concentration should be obtained through participation in the Field Experience program (see page 20).

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

Course	FIRST YEAR	Credit
355-109 and 113 College Algebra and Trigonometry (1) OR		7
355-150 and 151 Mathematical Analysis (2) OR		8
355-156 and 157 Calculus and Analytical Geometry (3)		10
326-102a and 102b English Composition		6
391-106 Fundamentals of Speech		2
479-123 General Psychology		3
366-101 Personal Health		1
367-127a and 127b Physical Education		2
150-290 Industrial Organization ..		2
148-101 Drafting		2
157-102 Metals		2
137-117 Introduction to Graphic Arts		2

375-311 Government <i>Or</i>	3
338-110a, 407, or 410, History	3
000-100 Orientation	0

SECOND YEAR

355-151 and 153 Mathematical Analysis and Calculus (1) <i>or</i>	8
355-153 Calculus (2)	4
354-130 Computational Statistics	2
354-141 Digital Computer Programming	2
320-110a Principles of Economics I <i>or</i>	3
320-201 General Economics	3
311-115 Inorganic Chemistry	5
391-223 Essentials of Public Speaking	2
150-300 Production Management	3
196-103 Woodworking	2
176-202 Power Mechanics	2
196-203 Plastics	2
124-208 Electricity	2
Electives	2-6

THIRD YEAR

326-346 Expository Writing	3
311-208 Organic Chemistry	4
372-421 Physics—Electricity, Heat, Mechanics	5
372-423 Physics—Sound, Light	3
387-309 General Sociology	3
150-400 Quality Control	2
150-410 Production Control	2
150-420 Time and Motion Study	2
Electives	9

FOURTH YEAR

372-425 Physics—Strength of Materials	3
320-414 Labor Economics	3
479-435 Personnel Management	3
Electives	23

Students majoring in Industrial Technology may elect courses leading to a concentration in areas such as: Manufacturing Engineering, Plant Engineering, Technical Sales and Service, Product Development, Packaging, Graphic Arts, Electronics, Power Technology, and Building Construction. Information on specific concentrations can be obtained by writing to the director of the Industrial Technology Major.

The student must fulfill the English adequacy and speech proficiency requirements prescribed by the respective departments.

MANUAL ARTS THERAPY

Students completing an industrial education major may qualify for an additional major in manual arts therapy by serving an internship of nine to twelve weeks in two Veteran's Administration hospitals taking specialized courses and practice in therapeutic psychology.

Manual arts therapists hold positions in hospitals and rehabilitation centers interpreting and implementing physicians' work therapy prescriptions; measuring and developing adult patients' work capacities

by means of industrial work situations; and participating in case conferences with physicians, clinical psychologists, consulting psychiatrists, and other therapists.

MARKETING AND DISTRIBUTIVE EDUCATION

(Preparation to teach in Secondary Schools or Technical Institutes)

GENERAL REQUIREMENTS — BS DEGREE:

1. Total for graduation 130 credits
 - Professional Education 26 credits
 - Courses directly related to major 34 credits
 - Liberal Studies Required 31 credits
 - Liberal Studies Electives 29 credits
 - Free Electives 10 credits
2. Students must complete:
 - a. a major with a 22-credit minor *or*
 - b. a major with two 15-credit concentrations *or*
 - c. a double major—Marketing and Distributive Education, and Business Administration. The student considering this option should anticipate some additional summer session work or an extra semester.
3. Students must complete a minimum of 6 months of related work experience. This work experience may be completed before entrance or by enrolling in Field Experience course 416-197, 297, 397, or 497. The Field Experience Program is described on p.

Due to the recent recognition of the importance and size of the marketing and distributive sector of our economy, this area of vocational education is experiencing a tremendous growth at both the high school and post-high school level. Men and women graduates of this curriculum will not only be teachers of marketing and local business management subjects, but will also work very closely with the local business community.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR

Course	Credit
326-102 a-b English Composition	3
391-106 Fundamentals of Speech	2
367-127 a-b, 368-128 a-b Physical Education	2
479-123 General Psychology	3
304-106 Fundamentals of Design	3
391-223 Essentials of Public Speaking	2
387-309 General Sociology	3
366-101 Personal Health	1
150-290 Industrial Organization	2
Mathematics Elective	4-5
Electives	4-5

SECOND YEAR

320-110 a-b Principles of Economics	6
421-222 Principles of Secondary Education	2
309-330 Principles of Marketing	3
309-206, a, b Elementary Accounting	6
309-470 Principles of Advertising	3
479-303 Educational Psychology	3
354-141 Digital Computer Programming	2
Electives	8-10

THIRD YEAR

375-311 Government	3
309-325 Business Statistics	3
421-402 Principles of Vocational, Technical and Adult Education ..	3
309-404 Salesmanship & Sales Management	3
416-304 Introduction to Teaching DE*	3
479-435 Personnel Management	3
309-423 Retail Merchandising & Management	3
Electives	8

FOURTH YEAR

421-401 Introduction to Guidance and Counseling	2
416-404 Curriculum Development DE	5
416-408 Student Teaching DE	8
309-318 Business Law	3
309-479 Marketing Research	3
421-472 Coordination	2
Electives	7-9

* Students must make application for admission to the education sequence at this point and meet the general requirements listed in the Professional Education section of course descriptions.

PRESCHOOL EDUCATION

To prepare to teach in nursery school, kindergarten, and child care centers; to serve in child and family service agencies; to continue further study in child development and psychology, and to prepare for teaching child development on the university level.

GENERAL REQUIREMENTS — BS DEGREE:

1. Total for graduation 128 credits
 - Required in Liberal Studies 50 credits
 - Required in Education 17 credits
 - Required in Home Economics and Special Courses 46-47 credits
 - Electives 14-15 credits

Completion of electives by the following options may be used:

 - (a) One 22-credit minor (see list of minors by departments).
 - (b) Two 15-credit concentrations. See list of concentrations at end of curricula section.
 - (c) Free electives.
2. The student must fulfill the English adequacy and speech proficiency requirements prescribed by the respective departments.
3. Work experience may be obtained through participation in the Field Experience program.

4. Students may make application to the education sequence by the end of the sophomore year. Candidates must hold a cumulative grade point average of at least 2.25.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR

Course	Credit
000-100 Orientation	0
212-124 Child Development	3
214-108 Clothing in a Contemporary World	3
229-114 Food Science I	4
308-122 Biology	3
308-214 Physiology and Anatomy	3
326-102a-b English Composition	6
368-128a-b Physical Education	2
387-309 General Sociology	3
391-106 Fundamentals of Speech	2
479-123 General Psychology	3
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SECOND YEAR

212-235 Child Development Lab	1
212-248 Family Health	2
212-264 Child Guidance	2
212-265 Child Guidance Lab	1
229-212 Nutrition	3
304-106 Fundamentals of Design	3
311-115 Inorganic Chemistry	5
320-201 General Economics	3
326-300 Children's Literature	3
326-348, 350, 360, 400a or 400b Literature	3
360-134 Rudiments of Music	1
477-304PS Introduction to Teaching Preschool Ed.	3
Electives	2
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THIRD YEAR

212-307 Parent Counseling	2
212-349 Relationships in the Democratic Family	3
244-403 or 403R Home Management	4
304-206 Introduction to Art	2
326-346 Expository Writing	3
360-100 Applied Music	1
365-101 Introduction to Philosophy	3
303-420 Cultural Anthropology	3
477-404PS Curriculum Development in Preschool Ed.	3
479-352 Child Psychology	3
Electives	5
	<hr/>
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FOURTH YEAR

407-360 Audio-Visual Education	2
212-424 Advanced Child Guidance	3
Choose <i>at least two</i> of the following three:	
212-435 Seminar on Self Growth	2
212-437 Seminar in Child Development	2-3
212-485 Seminar on Culturally Disadvantaged Child and Family	3
338-407 History of Americas —or—	
338-410 Modern World	3
477-408PS Student Teaching at Preschool Levels --or—	
477-488PS Intern Teaching at Preschool Levels	9
479-432 Psychology of Exceptional Child	2
Electives	7-8
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PSYCHOLOGY

GENERAL REQUIREMENTS — BS DEGREE:

1. Total for Graduation 130 credits
 Total in Psychology 34 credits
 Total in Academic Areas .. 51-60 credits
 Total Electives 45-36 credits
2. Additional Requirements:
 One 22-credit minor; course used for the major may not be used in the minor.
 English and Literature, 15 credits including 326-102a, 326-102b, and 326-346.
 Mathematics and Science, 15 credits including 355-109 or 355-150.
 History and Social Studies, 15 credits including 387-309.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR

Course	Credit
479-123 General Psychology	3
479-214 Personality and Mental Health	3
326-102a English Composition ..	3
326-102b English Composition	3
328-101a Elementary French*	4
328-101b Elementary French	4
367-101 Personal Health (men only)	1
367-127a&b Physical Education (men only)	2
367-128a&b Physical Education (women only) ..	2
391-106 Fundamentals of Speech	2
391-223 Essentials of Public Speaking ..	2
Free Electives	16-8

*(High School foreign language two units may substitute for French)

SECOND YEAR

479-263 Experimental Psychology . . .	3
355-109 College Algebra or 355-150 Mathematics Analysis . . .	4
354-130 Computational Statistics . . .	2
387-309 General Sociology . . .	3
Psychology Electives . . .	6
Literature, Mathematics and Science, History and Social Studies Electives . . .	6
Free Electives . . .	10

THIRD YEAR

479-303 Educational Psychology or 479-352 Child Psychology . . .	2 or 3
326-346 Expository Writing . . .	3
387-350 Social Psychology . . .	3
Psychology Electives . . .	6
Literature, Mathematics and Science, History and Social Studies Electives to complete requirements . . .	9
Free Electives to complete minor requirements in general education and stated goals in psychology . . .	8 or 7

FOURTH YEAR

479-490 Aptitude and Achievement Appraisal . . .	2
Psychology Electives . . .	8-9
Free Electives to complete minor, other requirements and stated goals in general education and in psychology . . .	24-23
<i>Psychology Electives</i>	
479-326 Psychology of Marriage and Family . . .	2
479-350 Adolescent Psychology . . .	3
479-358 Differential Psychology . . .	3
479-366 Psychology of Learning . . .	3
387-420 Introduction to Cultural Anthropology . . .	3
479-430 Industrial Psychology . . .	2
479-431 Abnormal Psychology . . .	3
479-432 Psychology of the Exceptional Child . . .	2
479-435 Personnel Management . . .	3
479-475 Counseling Theory . . .	2
479-491 Psychology of Careers . . .	2
479-197, 297, 397, 497 Field Experience . . .	1-2 max. 10
479-199, 299, 399, 499 Independent Studies . . .	1-2 max. 10

Students with a completed major in psychology are to have basic understandings in these psychological concepts: Human relationships, personality and mental health, perception, motivation and emotions, learning, development of individual differences, and the methods and instruments used to study human behavior. Selection of electives, reading and independent study topics should be based upon individual needs and interests in the above psychological concepts.

TECHNICAL EDUCATION — ELECTRONICS CONCENTRATION

(Preparation to teach in Technical Institutes)

GENERAL REQUIREMENTS — BS DEGREE:

1. Completion for graduation 130 credits
 Required in Liberal Studies 59-65 credits
 Required in Education 20 credits
 Required in Technical Work 40 credits
 Electives in Liberal Studies 5-11 credits
2. Completion of six months of related industrial experience.
3. Work experience related to a Concentration should be obtained through participation in the Field Experience program (see page 20).
4. Students qualifying for Advanced Placement, Independent Studies, or Honors courses will make appropriate substitutions in the requirements listed.
5. If a student is required to start his mathematics sequence with trigonometry (355-113), he should give consideration to attending the summer session before the fall of his freshman year. This is necessary in order to complete the mathematics sequence through differential equations prior to taking network analysis.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR

Course	Credit
355-150 and 151 Mathematical Analysis <i>OR</i>	8
355-156 and 157 Calculus and Analytical Geometry	10
326-102a and 102b English Composition	6
391-106 Fundamentals of Speech	2
367-127a and 127b Physical Education	2
366-101 Personal Health	1
372-421 Physics—Electricity, Heat, Mechanics	5
150-290 Industrial Organization	2
148-101 Drafting	2
157-102 Metals	2
176-202 Power Mechanics	2
000-100 Orientation	0

SECOND YEAR

355-153 and 154 Calculus <i>OR</i>	8
355-255 Differential Equations	3
354-141 Digital Computer Programming	2
479-123 General Psychology	3
372-423 Physics—Sound, Light	3
338— History Elective	3
311-115 Inorganic Chemistry	5
124-208 Electricity	2
124-228 DC and AC Circuit Analysis	3
124-322 Electronic Circuits	3
124-326 Semiconductor Electronics	3

SECOND YEAR (SUMMER)
Field Experience—3 months

THIRD YEAR

355-255 Differential Equations	3 (1)
326-346 Expository Writing <i>or</i>	3
326-416 Technical Writing for Industry	3
421-402 Principles of Voc. Tech. & Adult Education	2
479-303 Educational Psychology	2
449-304 Introduction to Teaching	3
Elective (Econ., Sociology, or Government)	3
Elective (Econ., Sociology, or Government)	3
124-424 Network Analysis	3
Electronic electives	9

THIRD YEAR (SUMMER)
Field Experience—3 months

FOURTH YEAR

449-404 Curriculum Development	5
449-408 Student Teaching	8
Electronic elective	6
Liberal Studies Elective	10-16
Seminar in Electronics	0
Applied Science and Technology Elective	2

Candidates must hold a cumulative grade point average of at least 2.25 and meet the speech and English proficiency requirements as described in the Professional Education section of course descriptions.

VOCATIONAL TRADE and INDUSTRIAL EDUCATION

(Preparation to teach in Vocational Schools)

GENERAL REQUIREMENTS — BS DEGREE:

1. Completion for graduation 130 credits
 - Required in Liberal Studies 51-52 credits
 - Required in Education 24 credits
 - Required in technical work 42 credits
 - Electives in Liberal Studies and/or education 12-13 credits

Completion of one of the following options (elective credits in Liberal Studies and Education will be used to complete this requirement).

 - (a) A 42 credit major in Industrial Education with one 22 credit Liberal Studies minor (see list of minors by departments beginning on page 61).
 - (b) A Broad Field Major in Industrial Education consisting of 42 credits of Technical work with two 15-credit Liberal Studies concentrations (see list of Liberal Studies Concentrations at the end of curricula section).

2. A student must also obtain an adequate amount of appropriate work experience for certification to teach Vocational, Trade and Industry courses.
3. Work experience related to a Concentration should be obtained through participation in the Field Experience program (see page 20).
4. Students qualifying for Advanced Placement, Independent Studies, or Honors courses will make appropriate substitutions in the requirements listed.

OUTLINE OF COURSES FOR THE FOUR-YEAR PROGRAM

FIRST YEAR		Credit
Course		
326-102a-b English Composition		6
391-106 Fundamentals of Speech		2
355-109 College Algebra		4
355-113 Trigonometry OR		3
355-150-151 Mathematical Analysis		8
479-123 General Psychology		3
387-309 General Sociology		3
367-127 Physical Education (a-b)		2
366-101 Personal Health		1
148-101 Drafting		2
157-102 Metals		2
137-117 Introduction to Graphic Arts		2
196-103 Woodworking		2
000-100 Orientation		0
		<hr/> 32-33
SECOND YEAR		
326-346 Expository Writing		3
311-115 Inorganic Chemistry		3
320-201 General Economics		3
391-223 Essentials of Public Speaking		2
421-222 Principles of Secondary Education		2
479-303 Educational Psychology		2
176-202 Power Mechanics		2
196-203 Plastics		2
124-208 Electricity		2
150-290 Industrial Organization		2
Technical Elective ¹		4
Electives in Liberal Studies or Education ²		4
		<hr/> 33
THIRD YEAR		
372-421 Physics—Electricity, Heat, Mechanics		5
375-311 Government		3
449-304 Introduction to Teaching ³		3
Technical Electives ¹		14
Additional Science Elective		
384-423, 372-425, 311-436, 311-445		3
Electives in Liberal Studies and Education ²		5
		<hr/> 33

FOURTH YEAR

History Elective	
388-407, 388-101a, or 338-410	3
449-404 Curriculum Development	5
421-401 Guidance	2
449-408 Student Teaching <i>OR</i>	
449-488 Intern Teaching	8
421-402 Principles of Vocational, Technical and Adult Education	2
Technical Electives ¹	8
Electives in Liberal Studies or Education ²	3-4
	<hr/>
	31-32
TOTAL	130

¹Technical electives will be selected in terms of area of technical concentration chosen.

²Electives will be chosen to complete one of two options. After option is complete electives may be used for *either* Liberal Studies or Education.

³Students must make application for admission to the education sequence at this point. Candidates must hold a cumulative grade point average of at least 2.25 and meet the speech and English proficiency requirement as described in the Professional Education section of Course Descriptions.

FIFTEEN-CREDIT ACADEMIC CONCENTRATIONS FOR HOME ECONOMICS

ART

Required courses are 304-106, Fundamentals of Design; 304-200, Drawing I; 304-300, Painting I; 304-320, Sculpture; and 304-390, Modern Art.

JOURNALISM

Required courses are 326-306, Reporting and News Writing; 326-410, Writing and Selling Feature Articles; 326-415, Technical Writing for Home Economics; 326-425, Copyediting and Preparation; 136-117, Introduction to Graphic Arts; 137-205, Elementary Photography; and 137-361, Printing Design.

ENGLISH AND SPEECH

Fifteen credits selected from the offerings in English and speech. At least four credits must be chosen from each area.

MATHEMATICS

Fifteen credits selected from the offerings in mathematics.

PSYCHOLOGY

Required courses are 479-123, General Psychology; 479-303, Educational Psychology or 479-352, Child Psychology; 479-366, Psychology of Learning; 479-432, Psychology of the Exceptional Child; and 479-490, Aptitudes and Achievement Appraisal. Recommended electives are 479-475, Counseling Theory; 479-214, Personality and Mental Health or 479-431, Abnormal Psychology; 479-358, Differential Psychology; and 479-326, Psychology of Marriage and Family.

SCIENCE

Fifteen credits selected from at least two of the following areas: biology, chemistry, physics.

SOCIAL SCIENCE

Fifteen credits selected from the offerings in social science.

Note: Please check with your adviser to see whether your program calls for a different combination of courses than those above.

FIFTEEN CREDIT CONCENTRATIONS FOR INDUSTRIAL EDUCATION OR VOCATIONAL EDUCATION

COMMUNICATIONS

Fifteen credits selected from the following: 326-102a and b, 326-306, 326-346, 326-410, 326-416, 326-425, 107-360, 391-106, E. 391-223, E. 391-322, E. 391-325.

MATHEMATICS

Fifteen credits selected from the following: 355-109, 355-113, 355-150, 355-151, 355-156, 355-157, 355-158, 355-153, 355-154, 355-141 or 453-241, 355-275.

SCIENCE

Fifteen credits selected from the following: 311-115, 311-116, 308-122, 311-208, 308-214, 308-314, 308-316, 372-421, 372-423, 372-425, 372-427, 372-429, 372-431, 372-433, 311-436, 311-438, 311-445, and 157-418.

SOCIAL SCIENCE

Fifteen credits selected from the following: 320-201, 387-309, 375-311, and any 3-credit history course and any other 3-credit social science course.

ART

Fifteen credits selected from the offerings in art.

PSYCHOLOGY

Fifteen credits selected from the following: 479-123, 479-303, 479-326 or 387-309, 479-366, 479-214 or 479-431, 479-490 or 354-130.

THE COURSE DESCRIPTIONS

Descriptions of all the courses offered by Stout State University are listed on the pages immediately following. They are listed in number order by departments within the four schools of the university—Applied Science and Technology, Home Economics, Liberal Studies, and Education.

Each course description contains the name of the course, the number (as explained on page 25), prerequisites, if any, and a brief explanation of the course. In some cases the number of lecture and lab hours per week are listed in parenthesis at the right top of the description.

SCHOOL OF APPLIED SCIENCE AND TECHNOLOGY (1)

HERBERT A. ANDERSON, ED.D., DEAN

Departments:	American Industry (02)	Industrial Technology (50)
	Audio-Visual Education (07)	Metals (57)
	Electronics (24)	Power Technology (76)
	Graphic Arts (37)	Safety (82)
	Industrial Graphics (48)	Wood Technics (96)
		Interdepartmental (100)

AMERICAN INDUSTRY (02)

INTERDISCIPLINARY SEMINAR

102-100A, B, C, D, E, F

Prerequisite: Permission
of American Industry staff

Integration of knowledges gained from disciplinary studies. Papers prepared upon a contemporary theme, presented, and defended before faculty disciplinarian. Open discussion based upon papers, faculty reactions, stated positions of faculty.

STRUCTURES AND CONCEPTS IN AMERICAN INDUSTRY 2 Credits (2-0)

102-115 Prerequisite: Permission of American Industry staff

An introduction to American Industry structures and concepts; history of the project. Systems for structuring knowledge. The concept structure of research.

PROCESSES I

4 Credits (4-6)

102-123 Prerequisite: Permission of American Industry staff

Conceptual study, including application, of the area of industrial processes generated by the basics of growing, extraction, conditioning, and combining.

COMMUNICATIONS

2-4 Credits (1-2) (2-4)

102-210 Prerequisite: Permission of American Industry staff

Development of the concept area of communication source, message, receiver, feedback, and interference; study of graphic, electronic, human and media systems of communication.

TRANSPORTATION

2 Credits (1-2)

102-214 Prerequisite: Permission of American Industry staff

Development of the concept area of transportation as related to the need, preparation, methods, destination and control as it relates to American Industry.

RELATIONSHIPS

2 Credits (2-0)

102-223 Prerequisite: Permission of American Industry staff

Development of the concept area of industrial relationships as related to the elements, associations, incentives and control aspects.

MATERIALS

2 Credits (1-2)

102-310 Prerequisite: Permission of American Industry staff

Development of the concept area of materials as related to the approach being taken by industry. Students become involved in selection, utilization and testing different systems.

FIELD EXPERIENCE

2 Credits

102-197, 297, 397, 497

(see page 20)

INDEPENDENT STUDIES

1-2 Credits

102-199, 299, 399, 499

(see page 19)

PROFESSIONAL TEACHER EDUCATION FOR AMERICAN INDUSTRY

2 Credits

401-205A, B, C, D, E, F

(see page 27)

PRODUCTION LAB

2 Credits (0-4)

102-412 Prerequisite: Permission of American Industry staff

A study which will interrelate all the concepts of American Industry by planning, organizing, developing, and marketing a product by means of contemporary production techniques.

ENERGY

2 Credits (1-2)

102-438 Prerequisite: Permission of American Industry staff

A study of medias by which usable power is developed from energy sources and of the transmission, utilization, and significance of these prime sources of power.

PHYSICAL FACILITIES

2 Credits (2-0)

102-402 Prerequisite: Permission of American Industry staff

A study of the concept area of property as related to industry with development in the areas of planning, types, classification, control, maintenance, and disposition.

FINANCE 2 Credits (2-0)

102-417 Prerequisite: Permission of American Industry staff

A study of the concept area of finance and procurement as related to industry, with emphasizes on the need, quantity, quality, source, schedules, methods and control.

PROCESSES II 2 Credits (1-0)

102-423 Prerequisite: Permission of American Industry staff

Conceptual study of the area of industrial processes generated by the basics of growing, extracting, conditioning, and combining to supplement and integrate skills and content derived from 148-101, 137-117, 157-102, and 196-103.

AUDIO-VISUAL (07)

ELEMENTARY PHOTOGRAPHY 2 Credits (2-2)

107-205

Fundamentals of photography including basic theory and technical information, composition, film processing, contact printing, enlarging, and mounting. Each student required to provide camera and film.

ADVANCED PHOTOGRAPHY 2 Credits (2-2)

107-405

Prerequisite: 107-205

Advanced monochromatic photography including camera techniques, composition, lighting, selection of photographic materials, film development, contact printing, enlarging, toning and application.

COLOR PHOTOGRAPHY 2 Credits (2-2)

107-445

Prerequisite: 107-205

Fundamentals of color photography including color theory, composition, multilayer films, color film processing, color printing, and application.

ELECTRONICS (24)

ELECTRICITY 2 Credits (2-1)

124-208

Prerequisite: Trigonometry 355-113

Principles of electricity as applied to power generation distribution and use. A study of direct and alternating current circuits, controls, capacitance, induction, transformers, polyphase systems, and measurement of electrical quantities. Not applicable to the electronic concentration.

D. C. AND A. C. CIRCUIT ANALYSIS 3 Credits (3-0)

124-228

Prerequisite: 124-224

Circuit theorems, applications of complex algebra, resistive circuit analysis, A. C. circuit analysis, Bode plot, transient analysis, and transformer analysis. This is a theoretical course; no laboratory is required.

ELECTRONICS
124-3102 Credits (2-1)
Prerequisite: 124-208

Solid state rectifiers, amplifiers, oscillators and associated input and output devices. Concepts of electronic communications and application of equipment to selected problems are also studied. Not applicable to the electronics concentration.

ELECTRONIC CIRCUITS
124-3223 Credits (2-1)
Prerequisite: 124-228

General electronic circuits, amplifiers, oscillators, wave-shaping circuits, power supply circuits and instrumentation. Laboratory work is required.

SEMICONDUCTOR ELECTRONICS
124-3263 Credits (2-1)
Prerequisite: 124-228

An analytical study of semiconductor physics, P-N junction diodes, CE, CB, CC configuration analysis, biasing and stabilization, graphical analysis, Z, Y, H and G equivalent circuit, T-models, R. F., A. F., and D. C. circuit analysis. Laboratory work is required.

ELECTRIC MACHINERY
124-3523 Credits (2-1)
Prerequisite: 124-228

Energy conversion theory, rotating machinery concept, engineering consideration, d. c. motors, synchronous machines, induction machines, fractional horsepower motors and speed control techniques of motors.

BASIC INSTRUMENTATION AND CONTROL
124-4122 Credits (2-1)
Prerequisite: 124-208, 124-310

Principles and practices of measurement and industrial control. Open and closed loop control system of control are studied. Transducers, analog to digital converters, and automatic read out systems are presented. Not applicable to the electronics concentration.

ELECTRIC COMMUNICATION
124-4142 Credits (2-1)
Prerequisite: 124-310

A study of electronic communication systems to the depth where the student will understand the function, principle of operation, application, and limitations of each system.

NETWORK ANALYSIS
124-4243 Credits (3-0)
Prerequisite: Calculus 124-228

A theoretical approach of electrical network analysis. Network equations, LaPlace transformation, frequency domain analysis, applied differential equations, steady state and transient analysis. No Laboratory work is required. This course is required for students to pursue more advanced studies in electronics.

INFORMATION THEORY
124-4403 Credits (3-1)
Prerequisite: 124-424; 124-326

Electronic communication theories, information transmission, network responses to signals, modulation systems, demodulation systems, amplitude modulation, double sideband, single sideband, narrow band frequency modulation, wide band frequency modulation systems, periodic sampling pulse modulation and demodulation, and noise analysis. Laboratory work is required.

COMMUNICATION SYSTEMS I

3 Credits

124-444

Prerequisite: 124-440

An analytical study of communication transmission and receiving systems, the circuits and design techniques of systems, signal transmission systems, signal receiving systems, and applied techniques. Laboratory work is required.

COMMUNICATION SYSTEMS II

3 Credits

124-446

Prerequisite: 124-444

An analytical study of antenna systems, electromagnetic field theory, low frequency antenna, high frequency antenna theory and design, radio frequency transmission lines and graphical synthesis of impedance matching networks. Laboratory work is required.

ELECTRONIC CONTROL SYSTEMS

3 Credits

124-454

Prerequisite: 124-352, 124-424

General electronic control systems, sensing devices, control devices, sequence control, basic feedback control principles, analog computation and control, numerical controls. Laboratory work is required.

FEEDBACK CONTROL SYSTEMS

3 Credits

124-458

Prerequisite: 124-454

Models and equations of linear system, feedback control components, general theory, response of feedback systems, the Nyquist criterion, Bode plot analysis, polar plots, frequency response, root-loci techniques, nonlinear system analysis. Laboratory work is required.

PULSE AND SWITCHING CIRCUITS

3 Credits

124-462

Prerequisite: 124-326, 124-424

Linear wave shaping, pulse transformers and delay lines, steady state switching, clamping and clipping circuits, switching circuits, logic circuits, multivibrators, time base generators, sampling gates. Laboratory work is required.

COMPUTER SYSTEMS

3 Credits (3-1)

124-464

Prerequisite: 124-462

An analytical study of electronic circuit design, philosophy of circuit design, general design procedures, C. C. and low frequency design, high frequency design, digital circuit design, switching circuit design, power supply, analog computer design, circuit evaluation techniques. Laboratory work is required.

FIELD EXPERIENCE

2-4 Credits

124-197, 297, 397, 497

(see page 20)

INDEPENDENT STUDY IN ELECTRONICS

1-2 Credits

124-199, 299, 399, 499

(see page 19)

GRAPHIC ARTS (37)

INTRODUCTION TO GRAPHIC ARTS 2 Credits (4-4)
137-117

Broad concepts of the several methods of reproducing visual images. Includes study in design and layout, composition methods, photo-conversion techniques, image carrier devices, image transfer mechanisms, and finishing procedures.

COPY PREPARATION 2 Credits (5-5)
137-214 Prerequisite: 137-117 or consent of Instructor

Review of the various printing mediums, art, photography, typography, layout, type, composition, platemaking, presswork, and bindery as related to the preparation of copy for reproduction. Laboratory experiences with the various materials and techniques used in preparing copy.

IMAGE TRANSFER 2 Credits (5-5)
137-236 Prerequisite: 137-117 or consent of Instructor

A study in breadth of offset, letterpress, gravure, and screen process machines and associated procedures used to transfer an image from a carrier to an interceptor.

COLD TYPE 2 Credits (5-5)
137-255

An introduction to cold type composition. Basic elements of hand composition and simple strike-one, paste-on, and photo-lettering devices.

HOT TYPE 2 Credits (5-5)
137-257 Prerequisite: 137-255 or consent of Instructor

The mechanism, care, and operation of hot metal casting and composing machines.

IMAGE CARRIERS 2 Credits (5-5)
137-358 Prerequisite: 137-117 or consent of Instructor

A study of the various types of relief, intaglio, planographic and stencil image carriers, with lab experiences in photographic, chemical and electronic scanning methods of producing line, halftone, and combination plates.

PRINTING DESIGN 2 Credits (6-4)
137-361

The study of two-dimensional design and its relationship to graphic reproduction in terms of balance, contrast, color, form and texture for specified communications.

GENERAL BINDING 2 Credits (5-5)
137-370

Study in depth of fastening and covering printed materials. Includes mechanical, loose-leaf, wire staple, sewn, and perfect binding methods.

OFFSET LITHOGRAPHY 2 Credits (5-5)
137-374

Fundamentals of offset lithography including units in camera work, platemaking, and presswork.

OFFSET LITHOGRAPHY 2 Credits
137-376 Prerequisite: 137-117 or consent of instructor

A study of high contrast photography as it relates specifically to the graphic reproduction processes. Emphasis is upon line, halftone, duotone, and special effect film negatives and positives.

PRINTING ECONOMICS 2 Credits (4-6)
137-449

Estimating production costs, specification of equipment, materials inventory and control, and the study of systems which expedite graphic reproductions.

COLOR SEPARATION 2 Credits (5-5)
137-450 Prerequisite: 137-376 or consent of Instructor

Study of the nature of color and light. Color separation from reflected and transmission copy. Theory of filters, densitometry, and their relation to color separation. Direct and indirect photographic color separation methods.

RELIEF AND SCREEN PROCESSES 2 Credits (5-5)
137-459 Prerequisite: 137-236

Study in depth of letterpress and screen process image transfer machines and associated procedures including printability of varied interceptrs.

INDEPENDENT STUDIES 1-2 Credits
137-199, 299, 399, 499
(see page 19)**FIELD EXPERIENCE** 2 Credits
137-197, 297, 397, 497
(see page 20)**INDUSTRIAL GRAPHIC (48)****DRAFTING** 2 Credits (2-2—open lab.)
148-101

Introductory graphics including the following: drafting techniques, freehand sketching, lettering, multiview projections, auxiliaries, sections, dimensions, pictorial representation. American Standards Association procedures emphasized.

MECHANICAL DRAFTING 2 Credits (3-7)
148-222 Prerequisite: 148-101

Solution of a stated mechanical design problem through the following: research, application of advanced drafting skills and design drawings, identification of materials and standard parts, and technical reports.

DESCRIPTIVE GEOMETRY
148-2243 Credits (3-2—open lab.)
Prerequisite: 148-101

The graphic representation and solution of space problems involving points, lines, planes, intersections, revolutions, and vectors.

TECHNICAL ILLUSTRATING
148-2262 Credits (2-8)
Prerequisite: 148-101

Prepare illustrations (which accompany a saleable product for assembly, maintenance and marketing) including: axonometric drawings, exploded views, assembly drawings, diagrammatic layouts, overlays with transparencies, and the use of appliques.

MACHINE DESIGN
148-2272 Credits (3-7)
Prerequisite: 148-222

Analysis of machine parts and their functions including the following: graphical statics, displacements, instantaneous velocities, simple and compound stresses, drives and geometric tolerances.

MACHINE DESIGN
148-2292 Credits (3-7)
Prerequisite: 148-227

Analysis of motion including: diagrams, threads, spur and bevel gears, worm and worm wheels, and cams.

ARCHITECTURAL DESIGN
148-231

3 Credits (3-3)

Analysis of building sites and family needs; preliminary sketches and instrument drawings; study of: estimating, lighting, heating, and loading; preparation of residential plans including: plot, floor, elevations, sections, perspective, electrical, plumbing and heating.

ARCHITECTURAL DESIGN
148-2332 Credits (2-2)
Prerequisite: 148-227

Analysis of eight commercial buildings including: site selection; legal limitations; flow patterns for customer, materials, and goods; maximum utilization; cost estimating; preliminary sketches; and instrument drawings.

TOPOGRAPHY
148-3262 Credits (3-7)
Prerequisite: 148-101 and trigonometry

Calculate and convert previously compiled field work data into usable forms for maps, profiles, and land descriptions.

MACHINE DESIGN
148-3292 Credits (3-7)
Prerequisite: 148-229

Production assembly drawings, inspection procedure, parts listing, jigs and fixtures, and tool and die.

ARCHITECTURAL DESIGN
148-3312 Credits (2-2)
Prerequisite: 148-223

Advanced area planning; FHA standards; national, state, local codes; problem solving by construction of models, individual research, and field trips.

PRODUCT DEVELOPMENT

2 Credits

148-434 Prerequisite: 148-227 or 148-233 or consent of instructor

Independent research directed to the solution of a student-selected design problem requiring application of the sciences, industrial graphics, identification of manufacturing methods, marketing and cost analysis, and model or prototype construction when appropriate.

INDEPENDENT STUDIES

1-2 Credits

148-199, 299, 399, 499
(see page 19)

FIELD EXPERIENCE

2 Credits

148-197, 297, 397, 497
(see page 20)

INDUSTRIAL TECHNOLOGY (50)

INDUSTRIAL ORGANIZATION

2 Credits (2-0)

150-290

Survey of the basic functions and inter-relationships of the major sub-divisions of industrial organizations.

PRODUCTION MANAGEMENT

3 Credits (3-0)

150-300

Prerequisite: 150-290
2.0 g.p.a.

Decision making for production management utilizing various analytical tools and techniques.

PACKING MATERIALS

3 Credits (3-0)

150-304

Prerequisite: 150-290, 196-203

Introduction to the field of packaging. A study of composition, properties, and applications of packaging materials, Standards and testing methods.

PLANT LAYOUT AND MATERIAL HANDLING

3 Credits (3-0)

150-310

Prerequisite: 150-330

Survey and application of the principles and methods used for solving plant layout and materials handling problems.

PACKAGING SYSTEMS

3 Credits (3-0)

150-324

Prerequisite: 150-304

Introduction to the elements of sound packaging. Work on design, construction, and testing of typical packages. Discussions on mechanical packaging methods.

QUALITY CONTROL

2 Credits (2-0)

150-400

Prerequisite: 150-300, 355-212

General overview of Quality Control including: establishment of quality standards, inspection principles and organization, control chart theory and application, acceptance sampling, organizing for quality control.

PRODUCTION CONTROL 2 Credits (2-0)
150-410 Prerequisite: 150-300, 355-212

Introduction to industrial plant operation; production planning and control. Forecasting, inventory control, production requirements, routing, scheduling, dispatching, and follow-up.

MANUFACTURING COST ANALYSIS 3 Credits (3-0)
150-413 Prerequisite: 150-300

Introduction to principles of accounting, and concepts and techniques of cost analysis. Emphasis placed on application of cost information.

ENGINEERING ECONOMY 3 Credits (3-0)
150-424 Prerequisite: 150-300

Analysis of the source and application of funds, including cost control, valuation, depreciation, replacement theory, and taxation. Emphasis on the engineering point of view.

PRODUCTION PROCESSING 3 Credits (3-0)
150-428 Prerequisite: 150-300, 355-212

Production processes with special consideration to product design as related to economic production. Emphasis on factors which influence the choice and sequence of process to obtain an end product.

STATISTICAL QUALITY CONTROL 3 Credits (3-0)
150-442 Prerequisite: 150-400

Application of statistics and probability theory in quality control. Emphasis on statistical theory underlying Schewart Control Charts, acceptance sampling plans, and introduction to design of experiment and analysis of variances.

INTRODUCTION TO OPERATIONS RESEARCH 3 Credits (3-0)
150-445 Prerequisite: 150-330, 355-212, 355-167, or 355-153

Business and industrial application of operations research techniques using linear programming, decision models, and Monte Carlo methods. Problem applications in allocation, sequencing, waiting lines, and competitive strategies.

FIELD EXPERIENCE 2 Credits
150-197, 297, 397, 497
(see page 20)

INDEPENDENT STUDIES 1-2 Credits
150-199, 299, 399, 499
(see page 19)

METALS (57)

METALS 2 Credits (4-6)
157-102

Introduction and orientation to the metals field. Equal time in machine shop, welding, foundry, and sheet metal. Exploratory experiences are provided in the four areas with fundamental operations and related technical information.

MACHINE SHOP 2 Credits (2-8)
157-113 Prerequisite: 157-102

Basic experiences on the engine lathe, drill press, milling machine, grinder and shaper. Hand tools and related information appropriate to fundamental operation is given.

SHEET METAL 2 Credits (2-8)
157-210 Prerequisite: 157-102

Fundamental machine and hand tool operations, soldering, pattern development, and related information. Discussions on materials, equipment, and supplies.

MACHINE SHOP 2 Credits (2-8)
157-235 Prerequisite: 157-113

Advanced shop practice; Sharpening of lathe tools, twist drills, milling cutters. Taper turning, grinding externally and on flat surfaces. Gear cutting on milling machine. Heat treating and layout techniques.

SHEET METAL 2 Credits (2-8)
157-239 Prerequisite: 157-210

Advanced pattern development involving parallel line, radial line, and triangulation. Advanced shop practice. Care and maintaining of equipment.

SHEET METAL 2 Credits (2-8)
157-241 Prerequisite: 157-210

Cabinet work involving direct layout with extensive work on the cornice and press brake. Spot welding. Discussions on selection and purchasing of supplies.

FOUNDRY 2 Credits (2-8)
157-243 Prerequisite: 157-102

Instructional units on foundry processes; sand analysis; core making; gating & risering; casting defect analysis; furnaces; melting and fluxing; pouring of aluminum. Discussion units on the casting of other non-ferrous and ferrous metals.

WINTER AIR-CONDITIONING 2 Credits (8-2)
157-330 Prerequisite: 157-210

Principles of heating, heat energy, heating systems, calculation of heating loads, heating drawings, burners, and control systems.

MACHINE SHOP 2 Credits (2-8)
157-435 Prerequisite: 157-237

Advanced production process; tooling problems and their solution by creative planning of set-ups. Designing and building of fixtures and jigs as necessary to solve problems.

WELDING I 2 Credits (2-8)
157-455 Prerequisite: 157-102

Fundamentals of electric arc and oxy-acetylene welding processes in the flat position; manufacture and handling of gases; selection and types of equipment; routine maintenance; types of electrodes, coatings, applications.

WELDING II

2 Credits (2-8)

157-457

Prerequisite: 157-455

Advanced work in arc and oxy-acetylene welding techniques; Vertical, horizontal, overhead positions; Destructive and non-destructive testing; MIG and TIG welding processes; Oxy-acetylene machine and air carbon arc cutting.

TOOL AND DIE MAKING

2 Credits (2-8)

157-461

Operations and technical information units for selected examples of single station cutting dies; drawing, expanding, non-cutting, assembling, progressive, and finishing dies. Layout, fabrication methods and operations involved are planned by the student.

MAINTENANCE OF METAL WORKING EQUIPMENT

2 Credits (2-8)

157-462

Prerequisite: 157-235

Repair and preventive maintenance of machine tool equipment. Emphasis on use of universal tool and cutter grinder. Alignment, fitting, and adjustment of precision machine tools.

METAL PRODUCTION AND PROCESSES

2 Credits (5-5)

157-477

Prerequisite: 157-102 and senior standing

Advanced study in manufacturing processes and the production of metals. Student opportunity to study areas in which he is deficient.

PLASTICS MOLD MAKING

2 Credits (2-8)

157-423

The student is required to design a metal mold for a plastic item and progress through the construction stages to the point where the mold will produce finished work pieces. A problem solving course in a specialized technical area.

INDEPENDENT STUDIES

1-2 Credits

157-199, 299, 399, 499

(see page 19)

FIELD EXPERIENCE

2 Credits

157-197, 297, 397, 497

(see page 20)

POWER TECHNOLOGY (76)**POWER MECHANICS**

2 Credits (5-5)

176-202

Power: sources, storage, transmission, instrumentation, control, conversion methods and utilization. Laboratory experiences include engine operation, construction and analysis. Also fluid power systems, circuit construction, operation and analysis.

GENERAL MOTOR MECHANICS

2 Credits (4-6)

176-242

Consumer knowledge on automobile chassis, internal combustion engine components, fuels, ignition, suspension, and drive systems. Service and adjustment techniques.

AUTO BODY REPAIR 2 Credits (2-8)
176-245

Analysis and repair of auto bodies, including interior trim repairing.

AUTO ENGINE REBUILDING 2 Credits (2-8)
176-247

Prerequisite: 176-202

Service procedures and practices for overhauling four stroke cycle gasoline engines including cylinders, pistons, rings, valve systems, camshafts, and crankshafts.

INDUSTRIAL HYDRAULICS 2 Credits (5-5)
176-307

Prerequisite: 176-202

Fluid power applications, laws, calculations, fluids, symbols, components, seals, packing, conductors, and connectors. Circuit design problems including component and control selection is emphasized.

AUTOMOTIVE ELECTRIC SYSTEMS 2 Credits (3-7)
176-341

Prerequisite: 176-202 —or— 124-208

Automotive ignition starting, generating, lighting and accessory circuits. Operating principles, diagnostic test, adjustments, repair and replacement methods.

AUTO SERVICE MANAGEMENT 2 Credits (5-5)
176-451

Prerequisite: Senior standing

Selecting, procuring, installing, preventive maintenance and repairing of diagnostic equipment for auto service facilities.

INDEPENDENT STUDIES 1-2 Credits
176-199, 299, 399, 499
(see page 19)

FIELD EXPERIENCE 2 Credits
176-197, 297, 397, 497
(see page 20)

SAFETY (82)

A minor in safety consists of 22 semester hours. Required courses are 182-423, 182-448, 182-452, and 182-455. Ten additional credits should be selected from the following courses: 176-242, 366-101, 479-303, 407-360, 416-304, 421-401, and 182-454.

GENERAL SAFETY 3 Credits
182-423

Prerequisite: Sophomore standing

Introduction to the philosophy and principles of accident prevention. Supervising school safety programs. Identification of resources and content such as, motor vehicle, home, public, farm, industrial, school, recreational, and civil defense.

DRIVER EDUCATION 3 Credits
182-448

Prerequisite: Valid Driver's License

Introduction to history, objectives, and instructional content and methods of traditional driver education programs. Laboratory experience involves instruction of student driver in dual controlled vehicles.

ADMINISTRATION OF DRIVER EDUCATION
182-452

3 Credits
Prerequisite: 182-448

Comprehensive programming of driver education programs. Emphasis on simulation, range, adult programs, driver improvement, handicapped instruction, and psychology of driver.

INDUSTRIAL SAFETY
182-454

3 Credits
Prerequisite: Junior standing

An overview of occupational accident prevention programs. Emphasis on techniques of measurement, cost of accidents, locating and identifying accident sources, psychology of occupational safety and problems of selecting corrective action.

TRAFFIC AND HIGHWAY SAFETY
182-455

3 Credits
Prerequisite: 182-423 or permission of instructor

An overview of the traffic and highway safety problems, components, research agencies, national, state and local policies, standards, and recommendations for improved traffic safety.

WOOD TECHNICS (96)

WOODWORKING
196-103

2 Credits (4-6)

A study of wood, modified wood, wood products, and the wood-working industry. Technical information on physical properties and characteristics of wood; basic techniques and procedures of furniture construction and building construction.

MACHINE WOODWORKING
196-131

2 Credits (4-6)
Prerequisite: 196-103

Technical information, job planning, fundamental principles of machine woodworking. Mass production in woodworking emphasized.

PLASTICS I
196-203

2 Credits (4-6)
Prerequisite: 196-103

A study of the materials and processes of the plastics industry. Technical information on the characteristics and properties of thermoplastic and thermosetting materials and processing equipment.

GENERAL FINISHING
196-209

2 Credits (4-6)
Prerequisite: 196-103

Technical information and application of finishes to various materials. Color theory, spraying, baking, drying, polishing, spot finishing, and re-finishing.

CABINET WORK I
196-215

2 Credits (4-6)
Prerequisite: 196-311

Must be taken in conjunction with Industrial Education 312. Problem solving, testing of materials, and advanced technical information. Student designs major project, develops job plan and evaluation devices, and begins project construction.

BUILDING CONSTRUCTION I 2 Credits (4-6)
196-219 Prerequisite: 196-103

Technical information and problems in building construction. Actual construction of fundamental components. Elementary roof framing.

PAINTING AND DECORATING 2 Credits (3-7)
196-221 Prerequisite: 196-209

Application of color theory, color mixing, painting, graining, stenciling, marbling, mottling, stippling, texturing, and dry wall construction.

PATTERNMAKING I 2 Credits (4-6)
196-225

Application of patternmaking principles, using wood, wax, plaster, and plastic materials for foundry.

DESIGN IN WOOD 2 Credits (4-6)
196-311 Prerequisite: 196-103

Study and application of basic principles of design utilizing wood and allied materials. Research, testing and completion of individual and group projects.

CABINET WORK II 2 Credits (4-6)
196-312 Prerequisite: 196-215

Must be taken in conjunction with Industrial Education 215. Advanced problem solving and technical information. Making of jigs and fixtures. Demonstrations of machine operations by class members. Completion of project begun in Industrial Education 215.

GENERAL WOODWORKING 2 Credits (3-7)
196-316 Prerequisite: 196-103

General Unit shop organization, upholstery and wood turning. Experience in organization and presentation of content in woodworking as it relates to the total industrial arts program.

BUILDING CONSTRUCTION II 2 Credits (4-6)
196-319 Prerequisite: 196-219

Technical information and problems in building construction with emphasis on exterior materials and components and advanced roof framing.

PATTERNMAKING II 2 Credits (4-6)
196-325 Prerequisite: 196-225

Production pattern design for foundry and plastics work. Experimental construction.

BUILDING CONSTRUCTION III 2 Credits (4-6)
196-421 Prerequisite: 196-203

Technical information and problems in interior finishing, cabinet and stair construction.

PLASTICS II

196-440

2 Credits (4-6)

Prerequisite: 196-203

Technical information relating to plastic materials and to tooling design for plastics. Product development with emphasis on experimental design in tooling and quality control.

TOOL AND MACHINE CONDITIONING

196-464

2 Credits (4-6)

Prerequisite: 196-103

Technical information on woodworking equipment, cutting theory, safety, and shop organization. Maintenance of woodworking machines, saw fitting, and general hand tool fitting.

INDEPENDENT STUDIES

196-199, 299, 399, 499

1-2 Credits

(see page 19)

FIELD EXPERIENCE

196-197, 297, 397, 497

2 Credits (2-0)

(see page 20)

THE SCHOOL OF HOME ECONOMICS (2)

AGNES S. RONALDSON, ED.D., DEAN

Departments: Child Development and Family Life (12)
Clothing and Textiles (14)
Food Science and Nutrition (29)
Home Management, Family Economics
and Equipment (44)
Hotel and Restaurant Management (45)

PROBLEMS IN HOME ECONOMICS

200-481

2 Credits (U or G)

Prerequisite: Consent of Instructor

This course will deal with special problems in depth as initiated by an instructor or according to student needs and interests. This course should serve as a culminating educative experience for students in the various areas of home economics.

CHILD DEVELOPMENT & FAMILY LIFE (12)

CHILD DEVELOPMENT

212-124

3 Credits (3-0)

Pre or Corequisite: 479-123

A developmental study from conception through adolescence of personality growth including physical, mental, social, emotional and spiritual aspects. Observation at each level of development.

CHILD DEVELOPMENT LABORATORY

212-235

1 Credit (0-2)

Pre or Corequisite: 212-124

Weekly observations in the Child Study Center during two different hours, culminating in a personality study of a child.

FAMILY HEALTH
212-248

2 Credits (2-0)

Current health attitudes, knowledge and issues of the family. Procedures for care of patients at home. Consideration given to community resources related to health care, protection and needs of the family.

CHILD GUIDANCE
212-264

2 Credits (2-0)

Prerequisite: 212-124

Study of guidance principles relevant to personality development of the young child. Evaluation of literature and application to case studies of preschool children. Supervised guidance in the Child Study Center for a limited number of students.

CHILD GUIDANCE LABORATORY
212-265

1 Credit (0-2)

Prerequisite: 212-124 & 235

Two hours weekly of supervised participation in the Child Study Center with emphasis on guidance techniques and depth understanding of preschool children.

PARENT COUNSELING
212-307

2 Credits (2-0)

Prerequisites: 212-124, 212-264
plus consent of instructor

Consideration given to various approaches and techniques of working with parents of preschooler. Emphasis given to increasing understanding of problems parents face in child-rearing. Observation and experience with parent groups.

RELATIONSHIPS IN THE DEMOCRATIC FAMILY
212-349

3 Credits (3-0)

Prerequisites: 479-123 & 388-309

Dynamics of social-psychological forces affecting human development in the life cycle of the contemporary family. Explorations of premarital, husband-wife, parent-child, and other familiar relationships. Focus on emerging self and student experiences in self-understanding.

ADVANCED CHILD GUIDANCE
212-424

3 Credits (2-2)

Prerequisite: 212-264

Study in depth of application of guidance principles as they concern development of the young child. Review of relevant research literature.

SEMINAR ON SELF GROWTH
212-435

2 Credits (2-0)

Prerequisite: Consent of Instructor

Exploration in depth of special problems and aspects in the child development field with preference given to students' interests.

SEMINAR IN CHILD DEVELOPMENT
212-437

2 Credits (2 Lec.-Disc.)

Prerequisite: Consent of Instructor

Exploration in depth of special problems and aspects in the child development field with preference given to student's interests.

SEMINAR ON THE CULTURALLY DISADVANTAGED CHILD AND FAMILY

3 Credits (3-0)

212-485

Prerequisite: Consent of Instructor

Study of problem, needs, related research and current trends to assist the disadvantaged child and family toward fuller actualization of potentialities for self and society.

FIELD EXPERIENCE

2 Credits

212-197, 297, 397, 497

(see page 20)

CLOTHING AND TEXTILES (14)

CLOTHING IN A CONTEMPORARY WORLD

3 Credits (3-0)

214-108

Exploration of basic concepts of clothing in evaluating the role of clothing in modern society; various facets within the clothing, textiles, and design fields and their contributions to individual growth and professional needs.

CLOTHING CONSTRUCTION

3 Credits (1-4)

214-118

Pretest to determine need

Application of basic principles of clothing construction and pattern alteration in the construction of garments.

TEXTILES I

3 Credits (2-2)

214-215

Fibers, yarns, fabric construction, finishes, and design as applied to the selection of clothing and household fabrics.

ADVANCED CLOTHING CONSTRUCTION

3 Credits (1-4)

214-218

Prerequisite: 214-118 or pretest

Selection of a designer pattern; fitting and construction of a garment in challenging fabric. Fitting techniques are also applied to a pants project.

FLAT PATTERN

2 Credits (0-4)

214-313

Prerequisite: 214-218

A study and application of the techniques of pattern designing through the use of basic patterns, muslin proofs, and garment construction.

FASHION MERCHANDISING

3 Credits (2-3)

214-325

Merchandising with application of fundamentals for selling, buying, and marketing procedures.

PRACTICUM IN TEXTILE DESIGN 3 Credits (0-6)
214-331 Prerequisite: 391-106

Exploring use of textile design techniques, primarily stitchery and hooking as a means of artistic expression. Students develop individual projects using stitchery and hooking techniques. Emphasis on design, creativity.

PRACTICUM IN TEXTILE PRINTING 3 Credits (0-6)
214-337 Prerequisite: 391-106

Exploring use of textile design techniques, primarily silk screen, block printing, and batik. Students develop individual projects using above techniques; emphasis on design and creativity.

TEXTILES II 2 Credits (2-0)
214-407 Prerequisite: 214-215

Problems involving fiber identification, fabric, performance, and fabric care. Chemical and microscopic testing procedures. Research methods for gathering and interpreting data. Individual problems.

DECORATIVE FABRICS 2 Credits (2-0)
214-411

Study of historic and contemporary fabrics with analysis of designs and techniques of decorating fabrics. The contribution of decorative fabrics to the enrichment of human experience.

DRAPING 3 Credits (1-4)
214-412 Prerequisite: 214-218

Application of principles of costume design in the construction of garments by means of draping. Emphasis on creativity.

APPAREL DESIGN 2-4 Credits (0-4)
214-439 Prerequisite: 214-313 or 214-412

Development of designs and construction of apparel using advanced techniques.

TAILORING 3 Credits (1-4)
214-450 Prerequisite: 214-218

Application of tailoring techniques in making suits and coats.

EUROPEAN STUDY TOUR 3-6 Credits
214-465

Tour of European centers of art, clothing, and textiles. Study of the cultural patterns they reflect. Six week program includes lectures by consultants and seminars on the various phases of the fashion and fabric industries. (Summer)

HISTORY OF COSTUME: ANCIENT TO EUROPEAN 1900 3 Credits (3-0)
214-471

Development of costume throughout the ages. Fashion as it reflects the cultures of the past. Influence of the past on present-day costume.

CLOTHING AND TEXTILE INDUSTRY

3 Credits (3-0)

214-473

Prerequisite: 214-215

The clothing and textile industry, its organization, promotion methods, and the interrelationship of the major factors of industry and its markets.

HISTORY OF AMERICAN COSTUME

2 Credits (2-0)

214-475

Costume as it developed in the United States from Colonial Period to present day. Aspects of costume reflecting the cultural development. Influences of foreign countries upon costume and culture.

RECENT DEVELOPMENTS IN CLOTHING AND TEXTILES

2 Credits (1-2)

214-479

Prerequisite: 214-218

Discussion, demonstration, and laboratory work. Individual experimental problems to determine choice, use, and care of modern fibers and fabrics. Newer construction techniques adapted for these fabrics.

SOCIAL-PSYCHOLOGICAL ASPECTS OF CLOTHING

3 Credits (3-0)

214-480

Evaluation of research in consumer motivation, shopping behavior, and satisfactions with garments. Study is made of how society influences an individual's clothing choices and practices at various age levels.

CLOTHING AND TEXTILES PROBLEMS

2 Credits (2-0)

214-482

Individual investigation in one specific field of interest within clothing and textiles. Opportunity to correlate clothing and textiles with related fields.

FIELD EXPERIENCE

2 Credits

214-197, 297, 397, 497

(see page 20)

FOOD SCIENCE AND NUTRITION (29)

FOOD SCIENCE I

4 Credits (2-4)

229-114

Scientific approach to food preparation.

NUTRITION

3 Credits (2-2)

229-212

Prerequisite: 229-114

Principles of human nutrition and application in the selection of food for members of the family group.

FOOD SCIENCE II

3 Credits (2-2)

229-230

Prerequisite: 229-114

Basic scientific principles and methods involved in appraisal, selection, preparation, and preservation of food.

APPLIED INSTITUTION MANAGEMENT 3 Credits (2-2)
229-300 Prerequisite or parallel: 229-308

Not open to persons with credit in 229-328

Concepts for purchasing and preparation of food in quantity. Menu planning, recipe development, management, and cost control.

MEAL MANAGEMENT 3 Credits (2-2)
229-308 Prerequisite: 229-212

Planning, preparation, and service of meals. Management of money and time, efficient use of equipment, consideration of nutrition needs, food habits, and social customs of family groups.

NUTRITION AND DIETETICS 3 Credits (2-2)
229-310 Prerequisites: 229-212, 308-362, 311-322

Principles of human nutrition applied to individual, family, community, and world problems.

FOOD SERVICE ADMINISTRATION 3 Credits (3-0)
229-328 Prerequisite or parallel: 229-308

Organization and administration of food service systems; personnel selection and training, cost control, sanitation, and problems of management.

DIET THERAPY 3 Credits (2-2)
229-418 Prerequisite: 229-310

Principles and methods for the use of diet as a therapeutic measure in certain pathological conditions.

READINGS IN FOOD SCIENCE AND NUTRITION 2 Credits (2-0)
229-431 Prerequisites: 229-212, 311-115, or 135, 308-214

Critical reading, evaluating, and reporting from pertinent current journals and other publications.

MATERNAL AND CHILD NUTRITION 3 Credits (3-0)
229-433 Prerequisites: 229-212, 212-234, 308-214

Application of basic knowledge to maternal, infant, child, and adolescent nutrition.

EXPERIMENTAL FOODS 3 Credits (0-6)
229-438 Prerequisites: 229-230, 311-115 or 135

Experimentation with selected food materials, techniques, and equipment. Opportunity for directed study in an individually chosen area.

ADVANCED FOOD PREPARATION 2 Credits (1-2)
229-442 Prerequisites: 229-230, 229-308

Based on the student's special interest in the field of food selection, preparation, and appraisal.

SCHOOL FOOD SERVICE
229-443

2 or 3 Credits

Prerequisite: 229-308

Not open to persons with credit in 229-328

Management of type A school lunch program. Recent developments in food selection and preparation, equipment, cost control, sanitation, and personnel management.

QUANTITY FOOD PRODUCTION AND SERVICE
229-452

3 Credits (1-4)

Prerequisite: 229-328

Concepts for quantity food preparation and service. Laboratory experience in preparation, service, and food costing.

INSTITUTION FOOD PURCHASING
229-454

2 Credits (2-0)

Prerequisite: 229-328

Methods of purchasing food in large quantities. Determination of standards, specific needs, and industrial offerings; formulation of specifications, buying procedures, and controls.

FOOD SERVICE EQUIPMENT
229-455

2 Credits (2-0)

Prerequisite: 229-328

Factors affecting planning, selection, and layout of food service equipment and facilities.

FOOD SERVICE MANAGEMENT FOR CHILD DEVELOPMENT CENTERS
229-458

2 Credits (1-2)

Prerequisite: 229-114

Administration of food service for preschool children in centers, with consideration of individual needs and emotional reactions to food, meal planning, purchasing, receiving and storage, principles of food preparation and service, and equipment.

ADVANCED FOOD PRODUCTION MANAGEMENT
229-475

3 Credits (1-4)

Prerequisite: 229-452

Advanced food production planning and controls with management experience in campus food services.

FIELD EXPERIENCE

2 Credits

229-197, 297, 397, 497

(see page 20)

HOME MANAGEMENT, ECONOMICS AND EQUIPMENT (44)

CONSUMER ECONOMICS
244-317

3 Credits (3-0)

Prerequisite: 385-201

Motives in consumption; family income and expenditures, selection of commodities and services; buying and selling practices. Evaluation of consumer aids and investigation of local situations.

HOME EQUIPMENT AND HOUSEHOLD PHYSICS 3 Credits (2-2)
244-333

Application of general laws and principles of physics to household appliances. Selection, operation, use, and care of home equipment. (Semester 1, 2, Summer).

DEMONSTRATION TECHNIQUES 2 Credits (0-4)
244-400 Prerequisite: 299-308

Application of demonstration principles in planning and presenting all types of Home Economics demonstrations.

HOME MANAGEMENT, NON-RESIDENCY 4 Credits (3-arr.)
244-403 Prerequisite: 229-308

Management of resources for attainment of personal and family goals. Principles of management applied through directed experiences in student's living situation. (Semester 1, 2, Summer).

HOME MANAGEMENT RESIDENCE 4 Credits (2-arr.)
244-403R Prerequisite: 229-308

Management of family resources for attainment of successful family life; social aspects and adjustments of group and family living. Residence in home management house with homemaking and managerial experiences. (Semester 1, 2, Summer).

FAMILY FINANCE 2 Credits (2-0)
244-428 Prerequisite: 388-201

Management in relation to personal and family finance. Experiences in budgeting income and expenses and planning for adequate insurance, home financing, and savings and investments. (Semester 1, 2, Summer).

FIELD EXPERIENCE 2 Credits
244-197, 297, 397, 497
(see page 20)

HOTEL AND RESTAURANT MANAGEMENT

INTRODUCTION TO HOTEL AND RESTAURANT MANAGEMENT 3 Credits (3-0)
245-101

Development of historical background, the economics of tourism, vocational opportunities, basic system and organizational analysis, research, trends in industry and problems of current importance.

BASIC FOODS 4 Credits (2-4)
245-110 Prerequisite: -101

Basic principles of food preparation, fundamentals of nutrition, understanding interaction of foods and preparation methods, analysis techniques of production problems, standard formulas, and essentials of quality products.

HOTEL AND RESTAURANT ACCOUNTING 3 Credits (3-0)
245-301 Prerequisite: 309-206a,b

Accounting procedures applied to hotels and restaurants, uniform system of accounts, departmentalization, costing procedures, statement analysis and interpretation, and case problems.

HOTEL AND RESTAURANT MANAGEMENT
245-305

3 Credits (3-0)

Prerequisite: 309-304

Management principles pertinent to hotels and restaurants, supervisory development and training, labor relations, union contracts, ownership and financial structure, and managerial interpretation and evaluation of current systems and procedures.

QUANTITY FOOD PRODUCTION
245-310

3 Credits (1-4)

Prerequisite: 245-110

Menu and formula analysis, analysis of production problems, costs of food and labor, and testing new food products.

FOOD AND BEVERAGE CONTROL
245-315

3 Credits (3-0)

Prerequisite: 245-301

Basic costing procedures for food and beverages, control systems, analysis methods and correction procedures.

MERCHANDISING AND SALES
245-316

3 Credits (3-0)

Prerequisite: 245-305

Effects of location, internal and external merchandising programs, definition of markets, group and convention business, public relations, and evaluation of programs.

SCHOOL OF LIBERAL STUDIES (3)

DWIGHT L. AGNEW, PH. D., DEAN

Departments:	Art (04)	Science
	Business Administration (09)	Biology (08)*
	English and Journalism (26)	Chemistry (11)*
	Foreign Language	Physics (72)*
	French (28)*	Social Science
	Spanish (29)*	Anthropology (03)*
	Mathematics (55)	Economics (20)*
	Applied Mathematics (54)*	History (38)*
	Music (60)	Geography (36)*
	Philosophy (65)	Political Science (75)*
	Physical Education	Sociology and
	and Athletics (66)	and Social Work (87)*
	Men (67) Women (68)	Speech (91)

* Since these may some day be separate departments, they are given separate numbers.

TWO YEAR PROGRAM

Before registering in the Liberal Studies Program, a student who has already selected a college from which he expects to be graduated should, if possible, obtain and study catalogs from the institution. Correspondence with officials of the college will also help to determine the most relevant courses and assure him of acceptance of the credits.

Certain courses are basic to almost every college curriculum:

Two semesters of English Composition (placement according to proficiency)

Mathematics (placement according to proficiency)
 Two semesters of laboratory science (biology, chemistry, or physics)
 Two semesters of history (either United States History or History of Western Civilization)
 Speech
 Foreign Language
 Physical Education

Other subjects frequently required for college graduation or frequently recommended as electives include: literature (English, American or both), sociology, economics, American government, additional laboratory science, additional mathematics, psychology, philosophy, additional speech, art, and music. In addition, there are many technical courses in both Home Economics and Industrial Education which serve as general education or would apply in specific professional curricula.

Pre-professional requirements differ widely from college to college. Usually a year or more of pre-professional work can be transferred to other colleges or universities in:

Agriculture	Medicine
Architecture	Nursing
Commerce	Pharmacy
Dentistry	Physical Therapy
Education	Medical Technology
Engineering	Social Work
Journalism	Veterinary Medicine
Law	

Pre-professional courses should be carefully worked out with the help of the advisor and catalogs of professional schools.

ART (04)

A minor in Art consists of 22 semester hours. Required courses are 304-106, 304-200, 304-300, 304-320, and 304-390. The additional 7 credits may be accumulated for a 22 credit minor by taking any studio or art history courses offered by the Art Department.

STUDIO COURSES IN ART

FUNDAMENTALS OF DESIGN 3 Credits (0-6)
 304-106

Elementary design in two and three dimensions using various media with the intention of developing visual sensitivity.

DRAWING 3 Credits (0-6)
 304-200

Concentration on the development of visual sensitivity through drawing with various media.

PAINTING 3 Credits (0-6)
 304-300

Introduction to the character and use of various painting media. Work from still life and life with reference to problems of two dimensional color composition.

SCULPTURE 3 Credits (0-6)
304-320 Prerequisite: 304-106 or equivalent
Introduction to sculptural concepts.

DESIGN 3 Credits (0-6)
304-332 Prerequisite: 304-106 or equivalent
Development of ideas presented in 304-106 in depth and complexity.
May be repeated.

INTERIOR DESIGN 4 Credits (1-4)
304-334 Prerequisite: 304-106
Problems involving the design, selection, and arrangement of furnishings for living and working quarters.

CRAFTS 3 Credits (0-6)
304-400 Prerequisite: 304-106 or equivalent
Emphasis on original designs in metal, leather, enamel, and weaving.

DRAWING 3 Credits (0-6)
304-401 Prerequisite: 304-200
Continuation of 304-200 with emphasis placed on the exploitation of media for creative and expressive ends. May be repeated.

PAINTING 3 Credits (0-6)
304-402 Prerequisite: 304-300
Advanced work in oil painting, with reference to the exploitation on the medium for creative and expressive ends. May be repeated.

SCULPTURE 3 Credits (0-6)
304-403 Prerequisite: 304-320
Advanced problems in sculpture with reference to the exploitation of media for creative and expressive ends. May be repeated.

CERAMICS 3 Credits (0-6)
304-411 Prerequisite: 304-410
Techniques in the use of clay, glazes, and kiln for the design and production of high fired ceramics. May be repeated.

LIFE DRAWING 3 Credits (0-6)
304-420 Prerequisite: 304-200
The human figure in action and at rest. Problems in figure composition.

PROBLEMS IN INTERIOR DESIGN 2 Credits (0-4)
304-423 Prerequisite: 304-334
Advanced work in the design, selection and arrangement of furnishings for living and working quarters. May be repeated.

WEAVING 2 Credits (0-4)
304-425 Prerequisite: 304-424
Advanced problems in weaving. May be repeated.

COSTUME DESIGN 2 Credits (0-4)
304-436 Prerequisite: 214-218
Development of original designs for clothing. May be repeated.

ART METAL 3 Credits (0-6)
304-440 Prerequisite: 304-106 or equivalent
The design and construction of objects in precious metals.

ART METAL 3 Credits (0-6)
304-441 Prerequisite: 304-440
Advanced problems in the design and construction of objects in precious metals. May be repeated.

HOUSING 3 Credits (0-6)
304-448 Prerequisite: 304-106 or equivalent
Problems in dwelling construction with consideration given to location of the lot, family activities, materials, and cost.

PRINTMAKING 3 Credits (0-6)
304-451 Prerequisite: 304-106 or equivalent
Introduction to printing media by the fine artist. Etching, engraving, lithography, serigraphy, wood block, and wood cut and contemporary developments in relief and intaglio printing.

PRINTMAKING 3 Credits (0-6)
304-452 Prerequisite: 304-451
Continuation of 304-451 with emphasis on the exploitation of the printing media for creative and expressive ends. May be repeated.

INDEPENDENT STUDIES 1 or 2 Credits
304-399
(see page 19)

ART THEORY AND ART HISTORY

INTRODUCTION TO ART 2 Credits
304-206
Principles of visual organization, the expressive possibilities offered by materials and the level of meaning and appreciation possible in the visual arts.

MODERN ART 3 Credits
304-390
The main currents and developments in art from Monet and Cezanne to 1950.

SURVEY OF ART: ANCIENT THROUGH MEDIEVAL 3 Credits
304-430
The painting, sculpture, architecture and minor arts in the ancient western world.

SURVEY OF ART: THE RENAISSANCE THROUGH TO THE 20TH CENTURY

304-431

Sculpture, painting, architecture and minor arts of the western world from 14th century to present.

EGYPTIAN AND MESOPOTAMIAN ART

3 Credits

304-480

The evolution of the arts of ancient Egypt and the Near East.

GREEK AND ROMAN ART

3 Credits

304-481

The arts of ancient Greece and Rome.

MEDIEVAL ART

3 Credits

304-482

The arts of Europe and Byzantium from the later Roman Empire to the end of the Middle Ages.

ITALIAN RENAISSANCE

3 Credits

304-483

The problems and the evolution of Italian Renaissance sculpture and painting from the 14th to the 18th century.

NORTHERN RENAISSANCE ART

3 Credits

304-484

The evolution of Renaissance art in northern Europe from the 15th to the 18th century.

NINETEENTH CENTURY ART IN EUROPE

3 Credits

304-490

History of European art from about 1800 to 1900.

ART SINCE 1950

3 Credits

304-491

Developments in painting and sculpture in Europe and America since 1950.

ORIENTAL ART

3 Credits

304-492

Art from prehistoric times to the 19th century in India and the Asian sub-continent.

ORIENTAL ART

3 Credits

304-493

Art from prehistoric times to the 19th century in China, Japan and their spheres of influence.

ESTHETICS

3 Credits

304-498

A seminar based on a study of statements by philosophers on art.

INDEPENDENT STUDIES

1 or 2 Credits

304-556

(see page 19)

Seminar in Art is restricted to graduate students. See the *Graduate Studies Bulletin* for course description.

GRADUATE COURSES — ART

304-501, Drawing; 304-502, Painting; 304-503, Sculpture; 304-511, Ceramics; 304-551, Printmaking; 304-556, Seminar in Art; 304-590, Modern Art, are restricted to graduate students. See the *Graduate Studies Bulletin* for course descriptions.

BUSINESS ADMINISTRATION — GENERAL (09)

PRINCIPLES OF ACCOUNTING

3 Credits

309-206a

The theory of debit and credit; the underlying principles of the various accounting records; modern business papers; working sheets; the balance sheet and the income statement; the sole proprietorship, the partnership.

PRINCIPLES OF ACCOUNTING

3 Credits

309-206b

Prerequisite: 309-206a

A development of the basic accounting theory which is introduced in 309-206a, including partnership and corporate forms of organization. The elements of branch and manufacturing accounting are included, as well as the introduction to cost accounting, budgeting, and the analysis and interpretation of financial statements.

PRINCIPLES OF BUSINESS ORGANIZATION

3 Credits

309-304

Prerequisite: 320-110a-b, or consent of instructor

Basic practices: Analyzing the managerial functions of organizing, staffing, directing, planning, and controlling; nature of authority and responsibility, departmentation, line and staff relations, production control, and personnel.

BUSINESS LAW

3 Credits

309-318

Prerequisite: Junior standing or consent of instructor

Introduction to law, contracts, agency nature and types of negotiable instruments.

BUSINESS STATISTICS

3 Credits

309-325

Prerequisite: One year of college mathematics

Method of collection, analysis, and presentation of economic, social, and business data. Ratios, frequency distributions, averages, variability, linear regression, correlation, time series analysis, and principles of index numbers.

PRINCIPLES OF MARKETING

3 Credits

309-330

Retailing, wholesaling, channels of distribution, marketing legislation, advertising, cooperative marketing, pricing, and research from the standpoint of consumers, middlemen, and manufacturers.

BUSINESS FINANCE

3 Credits

309-340 Prerequisite: 320-110b, 309-206b, or consent of the instructor

Principles governing the planning, raising, and control of short and long term funds for a business enterprise, large or small, corporate or noncorporate. Financial aspects of promotion and organization, sources of financing and the administration of income; failure and reorganization.

SALESMANSHIP AND SALES MANAGEMENT

3 Credits (2-2)

309-404

Prerequisite: 309-330

Basic concepts of selling including locating prospects, securing and conducting sales interviews, analyzing and handling different types of customers, closing sale, maintaining goodwill, etc. Study of sales organizations with emphasis on recruitment, selection, training, compensation, and cost control methods.

RETAIL MERCHANDISING AND MANAGEMENT

3 Credits (2-2)

309-423

Prerequisite: 309-330

Retail sales promotional techniques and practices with particular emphasis on display, layout, retail and cooperative advertising, mathematics of merchandising, etc. Retail management problems such as store location, types of goods stocked, inventory financing, credit operation, etc.

MANAGERIAL ACCOUNTING

3 Credits

309-435 Prerequisite: 309-206b, 320-110b, or consent of instructor

To give students majoring in general business an understanding of the significance of accounting data without involvement in mechanical techniques. Interpretation of financial statements, internal control, budgeting, costing of products manufactured and sold, analysis of cost-volume-profit decisions.

REGULATION OF INDUSTRY

3 Credits

309-450

Prerequisite: 320-110b

Economic concentration and maintaining competition, changing relationships between government and industry emphasizing regulatory legislation, administrative agencies, national policies, and social control.

PRINCIPLES OF INSURANCE

3 Credits

309-455

Prerequisite: 320-110b or consent of instructor

Basic principles of risk and insurance and their applications to business management and personal affairs. Analysis of concepts and methods of handling risks; insurance carriers and contracts and underwriting; loss prevention and settlement. government insurance programs. Economic functions of insurance.

PRINCIPLES OF ADVERTISING

3 Credits

309-470 Prerequisite: Principles of Marketing, or consent of instructor

A survey course presenting the psychological, social, and economic aspects of advertising. Advertising is presented in its relationship to the other factors of distribution with emphasis on the place of advertising in modern business.

MARKETING RESEARCH

3 Credits (2-2)

309-479

Prerequisite: 309-325, 309-330

Experimental and survey techniques used to secure information necessary for successful marketing such as who buys, what, when, where, how, and why. Both primary and secondary sources of information examined. Data collection, compilation, and analysis methods reviewed plus successful communication of conclusions and recommendations to management stressed.

ADMINISTRATIVE AND BUSINESS POLICIES

3 Credits

309-490

Prerequisite: Senior standing

Integrates the student's previous studies and further develops his ability to deal more effectively with business problems. Series of cases on policy formulation and administration, involving the functions of marketing, finance, accounting, and personnel.

COORDINATED FIELD EXPERIENCE

2-8 Credits

309-197, 297, 397, 497

(see page 20)

INDEPENDENT STUDIES

1 or 2 Credits

309-399, 309-499

(see page 19)

ENGLISH AND JOURNALISM (26)

ENGLISH

A minor in English consists of 22 semester hours. Required courses are 326-346, 326-348, and 326-400a and b. Additional English courses, excluding 326-102a and b, will be selected; 326-102a (Honors) and 326-102b (Honors) may be included. One course in journalism, either 326-306 or 326-410, and one course in speech, either 391-320, 340, or 444, may be included.

ENGLISH WRITING LABORATORY
326-101

0 Credit

Open to selected students for individual needs. New structural and linguistic approaches to basic writing.

ENGLISH COMPOSITION
326-102a

3 Credits

Rhetoric and logic applied to weekly student writing assignments. Emphasis on construction and organization. Includes History of English Language.

ENGLISH COMPOSITION
326-102b

3 Credits

Prerequisite: 326-102a

A continuation of 326-102a. Designed to improve effectiveness in writing based on reading of selected literary forms including non-English masterpieces. Techniques of documentation applied to organizing and limiting material.

ENGLISH COMPOSITION
326-102a (Honors)

3 Credits

Prerequisite: Departmental selection
on basis of ability

Readings in world literature and related writing designed for training in techniques of composition.

ENGLISH COMPOSITION
326-102b (Honors)

3 Credits

Prerequisite: Departmental selection
on basis of ability

Continuation of 326-102a (Honors). Includes the writing of a documented paper.

ENGLISH LITERATURE
326-216

3 Credits

Prerequisite: 326-102b

A short survey of English prose and poetry.

ANCIENT LITERATURE IN ENGLISH TRANSLATION
326-250

3 Credits

Prerequisite: 326-102b

Selection from Greek, Hebrew and Latin literature.

CHILDREN'S LITERATURE

3 Credits

326-300 Prerequisite: 326-102b, 421-304, or permission of instructor

Critical and evaluative survey of literature for young children with practical application to children and writing for them.

EXPOSITORY WRITING
326-346

3 Credits

Prerequisite: 326-102b

Factual writing including preparation of documented investigative paper.

AMERICAN LITERATURE
326-348

3 Credits

Prerequisite: 326-102b

American prose and poetry from its beginnings.

MODERN BRITISH WRITERS

3 Credits

326-350

Prerequisite: 326-102b

Selected poetry, prose, and fiction produced since World War I.

MODERN AMERICAN WRITERS

3 Credits

326-360

Prerequisite: 326-102b

Selected poetry, prose, and drama produced since World War I.

ENGLISH LITERATURE

3 Credits

326-400a

Prerequisite: 326-102b

English prose and poetry from Beowulf to 1798.

ENGLISH LITERATURE

3 Credits

326-400b

Prerequisite: 326-216 or 326-400a

English prose and poetry from 1798 to modern times.

FICTION

3 Credits

326-402

Prerequisite: 326-102b

An understanding of fiction achieved through the reading and discussion of representative novels.

THE ENGLISH NOVEL

3 Credits

326-403

Prerequisite: 326-102b

Origin and development of the novel. Selected readings.

POETRY

2 Credits

326-404

Prerequisite: 326-102b

Works of representative American and English poets of the late nineteenth and twentieth centuries.

SHAKESPEARE

3 Credits

326-406

Prerequisite: 326-102b

Representative plays of Shakespeare. Study of twenty plays and selected criticism.

INDEPENDENT STUDIES

1 or 2 Credits

326-399, 499

(see page 19)

JOURNALISM

A minor in journalism consists of 22 semester hours. Required courses are 326-306, 326-410, 326-425, 421-479, 137-117, 107-205, and 326-415 or 326-416. Additional courses will be selected from 304-106, 326-216, 326-348, 137-361, 137-449, 375-311, 338-407, 338-410, 387-411, 388-417, and 391-470.

REPORTING AND NEWS WRITING

2 Credits

326-306

Prerequisite: 326-102b

Theory and practice of news gathering and reporting, journalistic style, copy and proof reading. Discriminative newspaper reading; the history of journalism, libel.

WRITING AND SELLING FEATURE ARTICLES
326-410

2 Credits

Prerequisite: 326-102b

Practice in techniques of writing and selling feature articles for appropriate markets. Students are required to submit articles for potential publication.

TECHNICAL WRITING FOR HOME ECONOMICS
326-415

3 Credits

Prerequisite: 326-346 or consent of instructor

An overview of specialized writing done by home economists in business. Experience in preparing reports, letters, and other appropriate materials.

TECHNICAL WRITING FOR INDUSTRY
326-416

3 Credits

Prerequisite: 326-346 or consent of instructor

A survey of the type of writing current in industry. Writing of business reports and other materials.

COPY EDITING AND PREPARATION
326-425

2 Credits

Prerequisite: 137-117 or consent of instructor

Development of skill in expanding and reducing written materials. Experience in copy reading, proof reading, headlines.

PUBLIC RELATIONS
421-479

2 Credits

Defines the publics, objectives, and media of public relations in industry and education. Provides practice with such tools as news stories and features.

FIELD EXPERIENCE
326-197, 297, 397, 497
(see page 20)

2 Credits

FOREIGN LANGUAGE

FRENCH (28)

ELEMENTARY FRENCH
328-101a

4 Credits (4-0)

Introduction to the language; reading, writing, composition, and special emphasis on conversation.

ELEMENTARY FRENCH
328-101b

4 Credits (4-0)

Prerequisite: 328-101

Continuation of 328-101.

INTERMEDIATE FRENCH
328-201a

4 Credits (4-0)

Prerequisite: 328-102 or two years of high school French

Extensive and intensive reading in the language; review of grammar and oral practice.

INTERMEDIATE FRENCH
328-201b

4 Credits (4-0)

Prerequisite: 328-201a

Continuation of 328-201a

SPANISH (29)

ELEMENTARY SPANISH

4 Credits (4-0)

329-101a

Introduction to the language; reading, writing, composition, and special emphasis on conversation.

ELEMENTARY SPANISH

4 Credits (4-0)

329-102b

Prerequisite: 329-101a

Continuation of 329-101.

MATHEMATICS (54, 55)

A minor in mathematics consists of 22 semester hours. Required courses are the 355-150, 151 and 153, 154 sequences or the 355-156, 157 sequence. Additional mathematics courses numbered above 250 will be selected under guidance of the department.

Entrance into courses 355-100, 109, 150, or 156 is based on ability as demonstrated by high school record and a proficiency test.

An average of C or better in mathematics courses is strongly recommended as prerequisite for entrance into all mathematics courses above 250.

FUNDAMENTALS OF ALGEBRA

0 Credit

355-100

A review of the fundamental principles of elementary algebra.

COLLEGE ALGEBRA

4 Credits

355-109 (Formerly Math 209) Prerequisite: Demonstrated proficiency

Introduction to the real number system through logic, sets, and deductive reasoning; basic concepts of relations and functions.

SLIDE RULE

1 Credit

355-110

Scientific notation, principles of the slide rule; basic operations including multiplication, division, ratio and proportion. powers, roots; logarithmic and trigonometric functions.

TRIGONOMETRY

3 Credits

355-113 (Formerly Math 213)

Prerequisite: 355-109

Introduction to the elements of trigonometry and the transcendental functions; solution of triangles; logarithms.

ANALYTIC GEOMETRY

3 Credits

355-114 (Formerly Math 314)

Prerequisite: 355-113

Algebraic treatment of geometry, Graphical analysis of the straight line, circle, and conic sections. Simplification of equations; transcendental curves; polar coordinate system. Not open to students who have completed 355-150, 151, 156, 157, 158.

MATHEMATICAL ANALYSIS I 4 Credits
355-150 (Formerly Math 250a) Prerequisite: demonstrated proficiency

Nature of mathematics. Sets; real number system as a logical, deductive system; operations on algebraic expressions; inequalities, absolute values; circular, linear, and quadratic functions; determinants.

MATHEMATICAL ANALYSIS II 4 Credits
355-151 (Formerly Math 250b) Prerequisite: 355-150

Binomial expansion; mathematical induction; functions, limits, continuity; differentiation with application; inverse, exponential, and logarithmic function; complex numbers; elementary analytic geometry.

CALCULUS I 4 Credits
355-153 (Formerly Math 315a) Prerequisite: 255-151 (or 355-114 by permission)

Functions, limits, continuity, bounds, sets; the derivative of functions and applications; exponential, logarithmic, trigonometric and inverse functions. Not open to students who have completed 355-156, 157, or 158.

CALCULUS II 4 Credits
355-154 (Formerly Math 315b) Prerequisite: 355-153

Continuation of Calculus I. Antiderivatives; integration theory, techniques, and applications; parametric equations; vectors.

CALCULUS AND ANALYTIC GEOMETRY I 5 Credits
355-156 (Formerly Math 260a) Prerequisite: demonstrated proficiency

Review of real numbers, inequalities, absolute values, intervals, and continuity. Analytic geometry of the plane. Limit concepts, derivatives of algebraic functions; definite integral. Not open to students who have completed 355-150, 151, 153 or 154.

CALCULUS AND ANALYTIC GEOMETRY II 5 Credits
355-157 (Formerly Math 260b) Prerequisite: 355-156

Application of the derivative and definite integral. Conic sections, and other algebraic curves. Calculus for rational, algebraic, circular, exponential, and trigonometric functions; formal integration.

CALCULUS AND ANALYTIC GEOMETRY III 5 Credits
355-158 (Formerly Math 260c) Prerequisite: 355-157

Continuation of formal integration. Parametric equations, polar representation; Simpson's Rule, Cauchy's Formula, Taylor's Theorem; infinite series, solid analytic geometry, vectors, partial differentiation, multiple integration.

DIFFERENTIAL EQUATIONS 3 Credits
355-255 (Formerly Math 320) Prerequisite: 355-154 or 157

Common types of ordinary differential equations of the first and second order; linear equations with constant coefficients; series solutions, numerical approximations, systems of ordinary equations.

MODERN GEOMETRY 3 Credits
355-265 (Formerly Math 330) Prerequisite: 355-154 or 157

Vector approach to plane and solid analytic geometry. Lines, conics, spheres, planes, second and third order determinants, distance functions, loci, vector products, transformation of coordinates.

LINEAR ALGEBRA 3 Credits
355-275 Prerequisite: 355-154 or 157

Algebra of linear transformations and matrices. Determinants, equivalence relations, rank systems of equations, vector spaces, orthogonal transformations, characteristic equations and quadratic forms.

PROBABILITY THEORY 3 Credits
355-331 (Formerly Math 390) Prerequisite: 355-154 or 157

Probability in discrete sample spaces. Conditional probabilities, independent events, combinatorial analysis, random variables.

REAL ANALYSIS I 3 Credits
355-350 (Formerly Math 360a) Prerequisite: 355-154 or 157

Rigorous development of advanced topics in analysis. Functions, real numbers, sequences, Cartesian spaces, sequences of functions, limit superior and inferior, continuous functions.

REAL ANALYSIS II 3 Credits
355-351 (Formerly Math 360b) Prerequisite: 355-350

Continuation of the topics of Real Analysis I. Differentiation, integration, infinite series.

MODERN ALGEBRA I 3 Credits
355-470 (Formerly Math 325a) Prerequisite: 355-154 or 157

Set theory, mappings, equivalence relations and classes, mathematical induction, Peano's postulates, isomorphisms; development of natural numbers, integers, rational, and real numbers; introduction to integral domains and rings.

MODERN ALGEBRA II 3 Credits
355-471 (Formerly Math 325b) Prerequisite: 355-470

Continuation of Modern Algebra I. Rings, integral domains, fields, polynomials, groups, vector spaces. Introduction to the algebra of matrices.

APPLIED MATHEMATICS (54)

COMPUTATIONAL STATISTICS 2 Credits
354-130 (Formerly Math 212) Prerequisite: 355-109 or equivalent

Organization and presentation of data, computation of descriptive constants, regression and correlation theory and computation, elementary sampling theory; introduction to normal, binomial distributions, tests of hypothesis.

DIGITAL COMPUTER PROGRAMMING 2 Credits
354-141 (Formerly Math 240) Prerequisite: 355-109 or equivalent

Introduction to computer systems and their utilization. Emphasis on translating language and mathematical procedures of problem solving.

ADVANCED COMPUTER PROGRAMMING 2 Credits
354-241 (Formerly Math 340) Prerequisite: 354-141

Extension of the use of translating language with subprograms. Emphasis on assembly language and operation of a data processing system.

NUMERICAL METHODS 2 Credits
354-245 Prerequisites: 354-141 and 355-154 or 157

Computer programming and numerical methods for the solution of equations, simultaneous equations, interpolation, numerical differentiation and integration, statistical analysis.

MATHEMATICAL STATISTICS 3 Credits
354-332 (Formerly Math 400) Prerequisite: 355-331

The mathematical treatment of statistical data, frequency distribution functions, sampling theory, hypothesis testing, estimation and statistical design.

INDUSTRIAL STATISTICS I 2 Credits
354-430 Prerequisite: 334-332

Review of statistical methods, hypothesis testing, estimation, goodness of fit, and sampling distributions. Emphasis on design of experiments; statistical problems from business and industry.

INDUSTRIAL STATISTICS II 2 Credits
354-431 Prerequisite: 354-430

Continuation of application of statistics to problems from industry and business. Directed independent work on selected problems. Introduction to sequential analysis.

NUMERICAL ANALYSIS 3 Credits
354-445 Prerequisite: 355-275 and 354-245

Mathematical Theory supporting numerical methods by computer programming for solution of equations, simultaneous equations, numerical differentiation and integration, and approximation procedures.

MATHEMATICAL MODELS I 2 Credits
354-490 Prerequisite: senior standing in applied mathematics major

Supervised experiences in the construction of mathematical models for the solution of problems in the area of student needs and interests. Resource materials.

MATHEMATICAL MODELS II 2 Credits
354-491 Prerequisite: 354-490

Continuation of Mathematical Models I.

DIGITAL COMPUTER PROGRAMMING 2 Credits
354-541 (Formerly Math 540) Prerequisite: Graduate standing

Introduction to computer systems and their utilization. Emphasis on translating language with application to individual research projects, statistical or developmental. Not open to students who have completed 354-141, 241.

FIELD EXPERIENCE 2 Credits (Maximum of 6 Credits)
354-197, 297, 397, 497
(see page 20)

INDEPENDENT STUDIES 1 or 2 Credits
354-399, 499
(see page 19)

MUSIC (60)

The objective of the Stout music department is to provide musical experience and opportunities for the development of understanding and appreciation of music. The study of this art not only enhances intellectual acumen but also provides aesthetic enjoyment and aids in the development of social coordination through group effort. The organizations seek to further the interests of musical culture and entertainment and to enhance the spirit and character of the university.

The musical organizations are open to any student in the university who can qualify and may be taken for credit as academic electives. All students are invited to attend concerts and may elect music courses and organizations for university credit.

RUDIMENTS OF MUSIC FOR PRE-SCHOOL MAJORS 1 Credit
360-134

A study of the fundamental elements of music; i.e. note reading, pitch, rhythm and vocabulary. Emphasis is placed on the use of flute-ophone, autoharp, rhythm instruments, and the voice in class.

A survey of materials and methods suitable for pre-school music is made.

RUDIMENTS OF MUSIC 1 Credit
360-134

An integrated survey course in the fundamentals of musicianship: solfeggio, practical harmony, notation, arranging.

MUSIC APPRECIATION 2 Credits
360-153A

The materials of music as they pertain to perceptive listening. Study is related to the music of the nineteenth century and seeks to lead the student to a significant awareness of great music.

MUSIC APPRECIATION 2 Credits
360-153B

The materials of music are continued in relation to the music of periods not covered in 360-153B with emphasis on the twentieth century and the American scene.

GLEE CLUB 0 Credit
360-165

Testing and classification of voices, basic principles of good choral techniques. Provides the training necessary for membership in the Symphonic Singers.

MARCHING BAND $\frac{1}{2}$ Credit
360-166 Prerequisite: Satisfactory high school record
in instrumental music

Fundamentals of marching and playing. Performance at all parades and football games.

PEP BAND 0 Credit
360-180

An extension of the concert band. Performs at all home basketball games and two away games.

STAGE BAND 0 Credit
360-190

Primarily organized to study and perform the music of the large dance band. Membership by audition only. Membership open to any qualified Stout student.

ADVANCED TOPICS OF MUSIC 1 Credit
360-234 Prerequisite: 360-134

A continuation of 360-134 with considerable freedom of specialization according to individual needs, interest, and ability.

STOUT CONCERT BAND 1 Credit
360-266

Membership by audition only. Fundamentals of musical expression, tone production and quality, and special problems of technique. Formal concerts and radio broadcasting. Each spring instrumentalists are selected for the annual spring tour.

STOUT SYMPHONIC SINGERS 1 Credit
360-267

Membership by audition only. Advanced choral techniques, reading and analysis of choral music of all types and periods. Each spring vocalists are selected for the annual spring tour.

SOLO AND ENSEMBLE $\frac{1}{2}$ Credit
360-268 Prerequisite: 360-266 or 360-267

Coaching of advanced performers, both vocal and instrumental, for public performance and radio work.

APPLIED MUSIC 1 Credit
360-100, 200, 300, 400 Prerequisite: Audition

NURSING--COOPERATIVE TRAINING PROGRAM

Young women who plan to enter the three-year program of the Madison General Hospital School of Nursing, Madison, Wisconsin, are able to

complete the entire first year of that program on the Stout campus and then enter directly the clinical program at the School of Nursing in Madison. During her September-June year at Stout State University, each nursing student completes specified credits in English, chemistry, physiology and anatomy, biology, psychology, sociology, and elective subjects.

PHILOSOPHY (65)

INTRODUCTION TO PHILOSOPHY
365-101

3 Credits

Introduction to the various fields of philosophy, the history of philosophy, and the nature of philosophical investigation.

PHYSICAL EDUCATION AND ATHLETICS (66)

MEN (67)

All men students are required to take 2 credits in Physical Education during their freshman year; one-half credit must be in swimming. If an excuse or deferment from Physical Education is necessary for health reasons, the students must report to the college Health Service for temporary or permanent excuse. Permanent excuses are to be filed in the Office of the Registrar as well as in the Office of Physical Education.

If a student, on his first entrance at Stout, requests exemption from the physical education program, such requests must be made to the Vice-President for Academic Affairs. Entering students over 21 years of age (at date of first entrance) are exempt from the physical education requirement. Transfer students must abide by the above regulation. Credit is extended on the basis of the student's transcript. Students who have been exempt from physical education for any reason must make up that credit or credits.

PERSONAL HEALTH
366-101

1 Credit (1-0)

The relationship of personal health to the whole person. Of particular interest to the professional leader in education and community health practices.

PHYSICAL EDUCATION
367-127a

1 Credit (0-2)

One activity each quarter is to be selected from the following offerings: Apparatus, badminton and tennis, basketball and speedball, bowling, social dance (co-ed), swimming (non-swimmers, swimmers, or senior life saving), tumbling, volleyball, weight training, wrestling.

(Quarter 2)

PHYSICAL EDUCATION
367-127b

1 Credit (0-2)

One activity each quarter is to be selected from the following offerings: Apparatus, badminton and tennis, basketball and speedball, bowling, social dance (co-ed), swimming (non-swimmers, swimmers, or

pre-instructor's and instructor's course), tumbling, volleyball, weight training, wrestling. (Quarter 3)

Archery, bowling, golf, softball, and track, swimming (non-swimmers, swimmers, or pre-instructor's and instructor's course). (Quarter 4)

PRINCIPLES OF PHYSICAL EDUCATION 2 Credits (2-0)
367-150

The principles of physical education based on scientific facts and expression of educational ideals. Aims and objectives of physical education as applied to various school levels.

GYMNASTICS 2 Credits (1-2)
367-220

Elements of gymnastic tumbling and the use of gymnastic apparatus as a part of a modern program of physical education.

ATHLETIC TRAINING AND CONDITIONING 2 Credits (1-2)
367-250

To provide the student who is considering entering into the field of Physical Education and/or coaching, a basic understanding of the prevention, treatment and care of athletic injuries.

ADVANCED SWIMMING 2 Credits (1-2)
367-227

A course of instruction and participation in advanced swimming.

RECREATIONAL LEADERSHIP 2 Credits (2-0)
367-325

Objectives, principles, methods, and content of a recreational program. Problems of facilities, equipment, and leadership. Organization and administration of a recreational program for various age levels.

INDIVIDUAL AND DUAL SPORTS 2 Credits (2-0)
367-350

History and theories of play. Rules and regulations of individual and dual sports. Badminton, tennis, table tennis, bowling, golf, archery, horseshoes, and practice of the various skills.

ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION 2 Credits (2-0)
367-450

The problems that arise in everyday experience of the instructor in physical education. The relationship of physical education to general education; objectives of physical education, utilization, planning and care of facilities and equipment; time allotment, classification of activities and children, leadership, organization, supervision, routine procedures.

TEAM SPORTS 2 Credits (2-0)
367-455

Fundamentals and teaching knowledge of the following sports: touch football, soccer, softball, speedball, volleyball, basketball, hockey, and games leading up to team sports.

COACHING

2 Credits (2-0)

367-460

Fundamentals and methods of teaching and coaching football and basketball. Specified techniques analyzed. Definite plan of offense and defense presented. Rules, practice schedules, fundamentals, theories, and their application.

COACHING

2 Credits (2-0)

367-470

Fundamentals and methods of teaching and coaching baseball and track. Specific techniques analyzed. Definite plan of offense and defense presented. Rules, practice schedules, fundamentals, theories, and their application.

INTRAMURAL ATHLETICS

A complete program of all seasonal sports consisting of an "Athletics for All" aim is available to all students. Organized tournaments are conducted during the year in archery, badminton, basketball, bowling, golf, horseshoes, softball, swimming, table tennis, touch football, tennis, volleyball, and track. Varsity letter winners are not eligible to participate in the sport in which they have lettered. The facilities and equipment of the Department of Physical Education are available to students for recreation when there are no scheduled activities.

WOMEN (68)

One year (4 quarters with a total of 2 credits) of physical education is required of all women students during their freshman year. One quarter of movement fundamentals and one quarter of swimming must be included. Any student who presents an American Red Cross certificate of proficiency labeled "Swimmers, Advanced Swimmers, Senior Life Saving, or Water Safety Instructor" may petition exemption from the swimming requirement. The other two quarters may be selected from any of the other offerings.

Students are encouraged to elect additional classes during their sophomore, junior, and senior years. These may be selected from the PE 128 offerings, or preferably from among the other more concentrated offering.

Entering students over 21 years of age (at date of entrance) may be exempt from physical education requirements. Transfer students must abide by the above regulations. Credit is extended on the basis of the student's transcript.

If an excuse or deferment from physical education is necessary for health reasons, the student must report to the college Health Service for a permanent or temporary excuse. Permanent excuses must be filed in the Registrar's Office as well as in the Office of Physical Education.

PHYSICAL EDUCATION

1 Credit (0-2)

368-128a

One activity each quarter is to be selected from the following offerings: Archery, field hockey, folk dance, golf, movement fundamentals, riding, swimming (non-swimmers, advanced beginning, intermediate, swimmers, or senior life saving), tennis. (Quarter 1)

Badminton, bowling, gymnastics, modern dance, movement fundamentals, riding, social dance, swimming (non-swimmers, advanced beginning, or intermediate), volleyball. (Quarter 2)

PHYSICAL EDUCATION

1 Credit (0-2)

368-128b

One activity each quarter is to be selected from the following offerings: basketball, bowling, gymnastics, modern dance, movement fundamentals, riding, social dance, swimming (non-swimmers, advanced beginning, intermediate, swimmers, or water safety instructor.)

(Quarter 3)

Archery, golf, movement fundamentals, riding, softball, swimming (non-swimmers, advanced beginning, intermediate, swimmers, or senior life saving), tennis.

(Quarter 4)

GYMNASTICS

2 Credits (0-4)

368-215

Skills and methods in tumbling, apparatus and conditioning.

FIRST AID AND SAFETY

2 Credits (1-2)

366-240

American Red Cross requirements for standard and advanced First Aid. Safety practices for emergencies in the home, classroom, playground or business.

PERSONAL HEALTH

1 Credit (1-0)

366-101

The relationship of personal health to the whole person. Of particular interest to the Professional leader in education and community health practices.

(Quarter 1, 2, 3, 4)

RECREATION

The Women's Recreation Association is organized for the purpose of promoting a varied program of sports activities for all women on campus. This program operates as a division of the total athletic program. The Irene Erdlitz Recognition Award is offered annually to a woman who has shown outstanding leadership within the organization. Social events sponsored by the organization are the Athletic Tea and the Spring Banquet.

The W.R.A. is a member of the Wisconsin Athletic and Recreation Federation of College Women and participates in sportsdays held at other colleges and state universities.

SCIENCE**BIOLOGY (08)**

A minor in biology consists of 22 semester hours. Required courses are 308-122, 308-214, 308-306, 308-314, and 308-316. Additional courses will be selected.

GENERAL BIOLOGY 3 Credits (1-4)
308-122

Plants and animals and their importance to human welfare. The fundamental structures that determine an organism's mode of life; origin, development, inheritance, distribution, and interrelationships of plants and animals.

PHYSIOLOGY AND ANATOMY 3 Credits (1-4)
308-214 Prerequisite: 308-122

The human anatomy based on dissection of the cat and other laboratory material; fundamental physiological processes of all the organ systems; embryological development.

GENERAL BACTERIOLOGY 3 Credits (1-4)
308-306 Prerequisite: 308-122

Structure and physiology of yeasts, molds, and bacteria. Growth requirements; methods used in culture and identification; introductory studies in bacterial analysis of water and milk; other problems in sanitation and food bacteriology.

BOTANY 3 Credits (2-2)
308-314 Prerequisite: 308-122

An introduction to the structure and physiology of plants; survey of the plant kingdom; structure and life history of representative forms of plant life.

ZOOLOGY 3 Credits (2-2)
308-316 Prerequisite: 308-122

Survey of the animal kingdom; structure and physiology of representative animals; evolutionary relationships.

ADVANCED PHYSIOLOGY 3 Credits (1-4)
308-362 Prerequisites: 311-115, 308-214

Physiological processes; digestion, respiration, metabolism, excretion, circulation, and muscle. Histological studies of blood; experiments on frog and turtle hearts; nerve and muscle preparation. Respiratory, nerve, circulatory, and muscle experiments on the human body.

HEREDITY AND EUGENICS 2 Credits (2-0)
308-432 Prerequisite: 308-122

The essential principles of genetics and eugenics and their application to the human family. Physical, physiological, and mental traits in man; positive and negative eugenics and eugenics.

COMMUNITY HYGIENE 2 Credits (2-0)
308-442

Disease prevention through education, sanitation, isolation, and immunization. Public health programs and operation of federal and state laws.

ECOLOGY 3 Credits (2-2)
308-450 Prerequisites: 308-314, 308-316

Interrelationships of organisms with their physical and biotic environment.

INDEPENDENT STUDIES 1 or 2 Credits
308-399 and 308-499
(see page 19)

CHEMISTRY (11)

A minor in chemistry consists of 22 semester hours. Required courses are 311-115 or (311-135), 311-136, and 311-208. Additional chemistry courses will be selected.

INORGANIC CHEMISTRY 5 Credits (2-6)
311-115

The basic principles of inorganic chemistry; some of the important elements and compounds and their major applications to modern life.

INORGANIC CHEMISTRY 5 Credits (2-6)
311-135 Prerequisite: Demonstrated competence in academic work

Principles of inorganic chemistry and the properties of important elements and compounds. Approach is more rigorous and coverage more extensive than in 311-115.

INORGANIC CHEMISTRY 4 Credits (2-4)
311-136 Prerequisite: 311-115 or 311-135

A continuation of 311-115 or 311-135. Principles of chemistry and study of the elements based on the periodic table. Includes chemical and physical properties, source and preparation, common compounds, industrial processes.

ORGANIC CHEMISTRY 4 Credits (2-4)
311-208 Prerequisites: 311-115 or 311-135

An introduction to the chemistry of carbon compounds with emphasis on the characteristic reactions of the several functional groups. Aliphatic and aromatic compounds are studied concurrently.

BIOCHEMISTRY 3 Credits (1-4)
311-322 Prerequisites: 311-208 and 308-214

Digestion and metabolism of carbohydrates, fats, and proteins. Analysis of blood, urine, and other body fluids and tissues; nutritional significance of minerals, vitamins, enzymes, and hormones.

PHYSICAL CHEMISTRY 3 Credits (3-0)
311-417 Prerequisites: 311-115 or 311-135, 355-156
(311-438 recommended)

Fundamental physical chemistry; the behavior of gases, the liquid state, the properties of solution, the principles of thermodynamics, thermochemistry.

TEXTILE CHEMISTRY

3 Credits (2-2)

311-418

Prerequisite: 311-208

Chemical and physical properties of monomers and high polymers of the following natural and synthetic fibers: cotton, cellulose derivatives, silk, wool, linen, nylon, polyesters, acrylics, olefins and polyurethanes.

PHYSICAL CHEMISTRY LABORATORY

1 Credit (0-3)

311-428

Prerequisites: 311-115 or 311-135, 355-156
(311-438 recommended)

Laboratory which may accompany physical chemistry, normally taken concurrently. Experimental techniques and apparatus. Treatment of experimental data.

QUALITATIVE ANALYSIS

3 Credits (1-4)

311-436

Prerequisite: 311-115 or 311-135

The principles of equilibrium and solution chemistry, based on the laboratory procedures of separating and identifying some common cations and anions.

QUANTITATIVE ANALYSIS

3 Credits (1-4)

311-438

Prerequisite: 311-115 or 311-135

Introduction to the principles of quantitative chemical analysis and training in precision laboratory techniques.

CHEMISTRY OF MATERIALS

3 Credits (1-4)

311-445

Prerequisite: 311-115 or 311-135

Composition properties, and uses of common industrial and engineering materials; fuels and lubricants, iron and steel, non-ferrous metals and alloys, cement, paint and varnishes, synthetic rubber, and plastics.

INDEPENDENT STUDIES

1 or 2 Credits

311-399 or 311-499

(see page 19)

PHYSICS (72)

A minor in physics consists of 22 semester hours. Required courses are 372-421, 372-423, 372-427, and 372-429. Additional physics courses will be selected. 124-424 Network Analysis may be included.

PHYSICS—ELECTRICITY, HEAT, MECHANICS

5 Credits (3-4)

372-421

Prerequisite: 355-113 or 355-151

General laws of physics in the fields of electricity, mechanics, and heat. Laboratory problems and demonstration.

PHYSICS—SOUND, LIGHT

3 Credits (2-2)

372-423

Prerequisite: 355-113 or 355-151

General laws of physics in the fields of sound and light. Acoustics, vision, lighting standards, lenses, optical instruments, polarization, and fluorescence.

PHYSICS—STRENGTH OF MATERIALS 3 Credits (2-2)
372-425 Prerequisite: 355-113 or 355-151

Fundamental theory of strength of materials. Analysis of tension, compression, shear, biaxial tension and compression, torsion, stresses and deflection of beams, statically indeterminate beams, and theory of columns.

PHYSICS—ELECTRONICS 3 Credits (2-2)
372-427 Prerequisite: 372-421

Theory and application of semi-conductors, vacuum and gas tubes. Basic principles of electronic circuits.

PHYSICS—MODERN PHYSICS 3 Credits (2-2)
372-429 Prerequisites: 372-421 and 372-423

Elements of atomic and nuclear physics and the industrial application of atomic energy.

PHYSICS—MECHANICS I 3 Credits (2-2)
372-431

Essential elements of statics including simple force system, theory and application of non-concurrent forces, couples, friction, non-coplanar forces, trusses, and other structures.

PHYSICS—MECHANICS II 3 Credits (2-2)
372-433

Essential elements of dynamics including rectilinear, angular, and harmonic motions; forces producing motion, work energy, acceleration, impulse and momentum.

PHYSICS—OPTICS 3 Credits (2-2)
372-435 Prerequisite: 372-423

Geometrical and physical optics. Optical instruments, spectrum analysis, diffraction, interference, polarization and lasers.

INDEPENDENT STUDIES 1 or 2 Credits
372-399, 372-499
(see page 19)

SOCIAL SCIENCE

ANTHROPOLOGY (03)

INTRODUCTION TO CULTURAL ANTHROPOLOGY 3 Credits
303-420

Introduction to concepts and methods; variability of culture; outline of cultural elements; processes of cultural change.

ECONOMICS (20)

A minor in economics consists of 22 semester hours. Required courses are 320-110a and 110b, 320-359 and 360. Additional economics courses will be selected; 309-325 may be included.

GENERAL ECONOMICS 3 Credits
320-201 Prerequisite: Sophomore Standing

Introduction to the basic elements of economics. Analysis of economic institutions, issues, and policy; theories of price, national income, and employment. Not open to students taking 320-110a and 110b.

PRINCIPLES OF ECONOMICS I 3 Credits
320-110a Prerequisite: Sophomore Standing

Economic activities and institutions; price theory, income distribution, market mechanisms; functions of economic systems.

PRINCIPLES OF ECONOMICS II 3 Credits
320-110b Prerequisite: 320-110a

National income and employment analysis; business fluctuations; money and banking; industrial and labor relationships; international economics.

MONEY AND BANKING 3 Credits
320-207 Prerequisite: 320-201, or 320-110a

Nature of money and bank credit; modern monetary theories; monetary policy. Emphasis on economic aspects rather than institutional description.

LABOR ECONOMICS 3 Credits
320-414 Prerequisite: 320-201 or 110a

History of organized labor chiefly in Western industrial societies. Collective bargaining as viewed by labor, management, government, and the public. Basic labor economics; the institutions involved in modern labor relations.

COMPARATIVE ECONOMIC SYSTEMS 3 Credits
320-370 Prerequisite: 320-110b

Functions of all economic systems. Theories of capitalist, communist, and socialist systems. Comparison of the systems of different countries.

ECONOMIC DEVELOPMENT 3 Credits
320-416 Prerequisite: 320-110b

Social and economic factors underlying economic development. Capital formation, measurement of growth, population problems. Considers both theory and practical problems.

PRINCIPLES OF INTERNATIONAL TRADE 3 Credits
320-480 Prerequisite: 320-110b

Theory and practice. Capital movements; foreign exchange rates and controls; balance of payments; tariffs.

INTERMEDIATE ECONOMIC ANALYSIS I 3 Credits
320-359 Prerequisite: 320-110b

Microeconomics: value and distribution theory; analysis of demand—firm, industry and utility; pricing of factors of production.

INTERMEDIATE ECONOMIC ANALYSIS II 3 Credits
320-360 Prerequisite: 320-110b

Macroeconomics; determination of income, employment, growth rates, and price levels. Monetary and fiscal policies necessary for full employment.

PUBLIC FINANCE 3 Credits
320-445 Prerequisite: 320-360

Survey of public finance at all governmental levels; taxation, expenditures, debt management, and fiscal policy.

MANAGERIAL ECONOMICS 3 Credits
320-450 Prerequisite: 320-201 or 110a

Decision-making in the firm; demand and cost analysis; competitive and non-competitive price systems, marketing problems, capital budgeting, and criteria for investment decisions.

HISTORY OF ECONOMIC THOUGHT 3 Credits
320-453 Prerequisite: 320-110b

Principal economic writings of classical, neoclassical, and contemporary economists.

INDEPENDENT STUDIES 1 or 2 Credits
320-399, 499
(see page 19)

LABOR AND INDUSTRIAL RELATIONS
320-520

Restricted to graduate students. See the Graduate Studies Bulletin for course description.

HISTORY (38)

A minor in history consists of 22 semester hours. Required courses are 338-101a and 101b, and 338-202a and 202b. Additional history courses will be selected.

UNITED STATES HISTORY 3 Credits
338-101a

American history of 1865. Political, economic, and social forces which have shaped the nation to the close of the Civil War. Not available to students who have completed 338-407.

UNITED STATES HISTORY 3 Credits
338-101b

Continuation of 338-101a. Not available to students who have completed 338-407.

WESTERN CIVILIZATION 3 Credits
338-202a

Survey of Western civilization along the Nile, the Fertile Crescent, through Greece, Rome, the Middle Ages, the Renaissance, and the Reformation.

WESTERN CIVILIZATION 3 Credits
338-202b

A survey of Western civilization from the Reformation to the present.

ENGLISH HISTORY 3 Credits
338-211

The social, political, religious, military and economic history of Great Britain from the Restoration in 1660 to modern times.

ECONOMIC HISTORY OF THE UNITED STATES 3 Credits
338-301

Prerequisite: 320-201 or 110a

Economic evolution of the United States since colonial times. Development of economic problems and the foundations of modern industry.

BIOGRAPHY OF WORLD LEADERS 2 Credits
338-405

Readings in the biographies and autobiographies of American, European, and modern world leaders.

HISTORY OF AMERICA 3 Credits
338-407

Survey of the United States. Not open to those taking the 22-credit minor, nor those who have completed 338-101a or 101b.

RECENT HISTORY OF THE UNITED STATES 2 Credits
338-409

American history in the twentieth century. Study of recent world development in which the United States has played a part.

MODERN WORLD 3 Credits
338-410

Modern trends in terms of historical backgrounds, providing a frame of reference for interpreting the contemporary world. United Nations.

HISTORY OF MODERN RUSSIA 3 Credits
338-418

Survey of significant developments in Russia since 1815.

ASIAN HISTORY 3 Credits
338-422

An historical survey—political, social, religious, economic. Emphasis on India, China, Japan, and the Philippines during the modern world.

LATIN AMERICAN HISTORY
338-423

3 Credits

An historical survey—political, social, economic—or Middle and South America, pre-Columbian to the present.

INDEPENDENT STUDIES
338-399, 499
(see page 19)

1 or 2 Credits

GEOGRAPHY (36)**WORLD GEOGRAPHY**
336-104

3 Credits

Peoples and places of the world today. Causes and significance of areal differentiations in terrain and human life.

POLITICAL SCIENCE (75)**GOVERNMENT**
375-311

3 Credits

Functioning of governmental units in the U.S.A. Political principles, processes, problems; constitutional principles. Comparison of selected foreign governments.

STATE AND LOCAL GOVERNMENT
375-312

3 Credits

Prerequisite: 375-311 recommended

State and local governments within the U.S. federal system.

AMERICAN POLITICS
375-417

2 Credits

Prerequisite: 375-311

Analysis of modern political parties. Nominating methods, campaigns, elections. Practical politics in legislative bodies; machines and bosses.

INDEPENDENT STUDIES
375-399, 499

1 or 2 Credits

(see page 19)

SOCIOLOGY AND SOCIAL WORK (87)

A minor in sociology consists of 22 semester hours. Required courses are 387-309, 387-411, 387-350, and 303-420. Additional sociology courses will be selected; 479-326 (Psychology of Marriage and the Family) may be included.

GENERAL SOCIOLOGY
387-309

3 Credits

Social interaction in human groups. Relationships between the individual and the group; basic institutions; social change and current trends.

PROBLEMS OF AMERICAN SOCIETY
387-411

2 Credits

Prerequisite: 387-309

Sociological perspective on selected social problems.

SOCIOLOGY OF THE COMMUNITY 3 Credits
387-430 Prerequisite: 387-309

Structure of the community, chiefly in the U.S. Variability and current trends; research techniques; community development.

SOCIOLOGY OF THE FAMILY 3 Credits
387-315 Prerequisite: 387-309

The family as an institution. History; variations in other cultures; relationship to other institutions. Interactions of members in various stages of the life cycle.

SOCIAL PSYCHOLOGY 3 Credits
387-350 Prerequisite: 387-309

The theory of social interaction and its applications with special emphasis on communication.

JUVENILE DELINQUENCY 3 Credits
387-460 Prerequisite: 387-309

Definitions and trends of deviant behavior among youth; research findings; efforts toward prevention, control, and treatment.

SOCIOLOGY OF MINORITY GROUPS 3 Credits
387-475 Prerequisite: 387-309

Social-psychological aspects of the interaction between majority and minority groups; trends of minorities in the United States.

SOCIOLOGY OF WORK 3 Credits
387-440 Prerequisite: 387-309

Human behavior in various types of employment and occupations; trends in the occupational structure of the United States.

SOCIOLOGY OF LEISURE 3 Credits
387-425 Prerequisite: 387-309

An institutional approach to the effects of leisure on social structure; the values reflected in leisure; problems attending the increase in leisure resources.

SOCIOLOGICAL THEORY 3 Credits
387-455 Prerequisite: 387-309

Contributions of major social theorists; chief components of contemporary general sociological theory.

INTRODUCTION TO SOCIAL WORK 3 Credits
387-302 Prerequisite: 387-309 and either 387-411 or 387-460

The field of social work as a profession; history and philosophy of social services; basic information for teachers, counselors, and those interested in the profession.

INDEPENDENT STUDIES 1 or 2 Credits
387-399, 499 Prerequisite: 387-309
(see page 19)

SPEECH (91)

A minor in speech consists of 22 semester hours. Required courses are Speech 106 and 223. Additional speech courses will be selected. One course in English, either 326-348, 326-350, 326-400a, b, or 326-406, may be included.

SPEECH IMPROVEMENT

0 Credit

391-100

Individual and group assistance in attaining speech proficiency for those entering the teacher education program and for others with speech problems. Length of course varies with individual progress.

FORENSICS

1 Credit per year

391-101a, b, c, d

Training in speech through participation in intercollegiate forensics, including oral interpretation, oratory, extempore speaking, after-dinner speaking, debate, discussion, and preparation of speech programs.

FUNDAMENTALS OF SPEECH

2 Credits (2-0)

391-106

Techniques of effective speech based upon diagnosis of individual needs and training for the improvement of the necessary skills. Emphasis on speaker-listener relations, speech organization, voice, bodily action, language, and the development of confidence and poise.

SPEECH FOR INTERNATIONAL STUDENTS

2 Credits (2-0)

391-110

Practical experience in communicating in various situations. Individual and group attention to speaking and listening through the use of phonetics and tape recordings.

ESSENTIALS OF PUBLIC SPEAKING

2 Credits (2-0)

391-223

Prerequisite: 391-106

Advanced techniques of speaking. Development of proficiency in audience analysis, speech composition, and delivery of various types of speeches.

ADVANCED SPEECH ACTIVITIES

2 Credits (2-0)

391-320

Prerequisite: 391-106

Individual and group activities for developing skill in a variety of speech situations. Projects in analysis and delivery of literature. Special consideration of individual problems.

TECHNIQUES OF GROUP LEADERSHIP

2 Credits (2-0)

391-322

Prerequisite: 391-106

Techniques for presiding at various meetings through use of parliamentary law. Training in the art of persuasion as a means of motivating and guiding the behavior of others.

DISCUSSION AND DEBATE

2 Credits (2-0)

391-325

Prerequisite: 391-106

Principles and techniques of discussion and debate: leading and participating in the symposium, panel, roundtable, and other discussion forms; preparing and presenting debates on current problems.

CONTEMPORARY THEATRE

2 Credits (2-0)

391-340

Prerequisite: 391-106

Analysis of selected plays including structure, dramatic content, and production methods. Field trips to current plays.

THEATRE WORKSHOP 1 Credit
391-344a Prerequisite: 391-106

Practical experience in directing, acting, and/or stagecraft through participation in university theatre productions.

THEATRE WORKSHOP 1 Credit
391-344b Prerequisite: 391-344a

Continuation of Speech 344a. Further experience in some phase of play production in university plays.

SPEECH SKILLS FOR BUSINESS AND INDUSTRY 2 Credits (2-0)
391-405 Prerequisite: 391-106 and Junior standing or consent of the instructor

Training in technical speaking; projects emphasizing the application of speech skills and activities in business and industry.

SPEECH SKILLS FOR LEADERSHIP 2 Credits (2-0)
391-406 Prerequisite: 391-106 and Junior standing or consent of the instructor

Application of leadership techniques and speech skills to classroom and educational activities.

PLAY PRODUCTION 2 Credits (2-0)
391-444 Prerequisite: 391-106

Survey of the art of play production: study of historical backgrounds, styles of production, and acting and directing techniques.

STAGECRAFT AND SCENE DESIGN 2 Credits (2-0)
391-445 Prerequisite: 391-106

Technical problems in producing plays: designing the set; constructing, painting, and handling scenery; stage lighting; make-up; costuming; sound and visual effects; and organization of the production staff.

INTRODUCTION TO SPEECH CORRECTION 2 Credits (2-0)
391-450 Prerequisite: 391-106

The nature, causes, and methods of correcting voice and articulation defects.

TELEVISION PROGRAMMING AND PERFORMANCE 3 Credits (1-4)
391-470 Prerequisite: 391-106

Planning, writing, and performing in instructional, public service, special feature, or dramatic television programs. Programs will be produced in cooperation with students in 107-493, Television Production Techniques.

DIRECTION OF SPEECH ACTIVITIES 2 Credits (2-0)
391-475 Prerequisite: 391-106

Organization, administration, procedures, and judging of speech activities such as plays, oratory, interpretation, public speaking, discussion, and debate.

INDEPENDENT STUDIES 1 or 2 Credits
391-399, 499
(see page 19)

SCHOOL OF EDUCATION (4)

ERICH R. OETTING, PH. D., DEAN

Departments: Education (21)
Home Economics Teacher Education (42)
Industrial Teacher Education (49)
Psychology (79)

EDUCATION — PROFESSIONAL TEACHER EDUCATION (4)

To qualify for teacher education, students must meet the following pre-admission requirements before they enroll in Education 304, Introduction to Teaching. They must have a grade point average of 2.25, and must maintain this average through the senior professional education semester.

Students must have approval from the Health Department. If a physical examination blank signed by a physician is properly filled out and on record in the office of the Health Department, and no known health problems exist, this approval is automatically provided by the school nurse who sends a signed form to the Dean of Student Affairs. Individuals facing special and temporary problems in health may apply for admission to the Student Personnel Committee for Teacher Education.

Students wishing to qualify for teacher education, must show proficiency in English by earning a "C" in the last course in English Composition or having a transfer record of "C" in such a course from another accredited college or university. If a deficiency exists, a student may elect to do remedial work in English to earn a "C" in the final examination of 102b, or earn a qualifying score on the Cooperative English Test administered by the University Counseling Center.

Students entering teacher education must also present evidence of speech proficiency. All students are rated in the first required speech course as to their proficiency. Those rated as unsatisfactory are required to enroll in Speech 100, Speech Improvement, a non-credit course, until they are approved for teaching.

(Department numbers in this section reflect the subject matter area.)

INTRODUCTION TO TEACHING ART IN THE ELEMENTARY SCHOOLS

3 Credits (3-0)

405-302

Development of basic knowledge and skills needed to foster and extend creative growth in children. (Semester)

INTRODUCTION TO TEACHING ART IN SECONDARY SCHOOLS

3 Credits (3-0)

405-307

Development of Art principles and practices that expand creative growth and development in secondary school students. (Semester)

STUDENT TEACHING

8 Credits

405-408

Prerequisites: 405-302 & 405-307

Directed teaching and community experiences in selected off-campus schools. (Quarter)

CURRICULUM DEVELOPMENT FOR ART

2 Credits (2-0)

405-434

A study of the needs and methods used in developing a sequential K-12 art curriculum. (Semester)

TEACHING AND SUPERVISION OF ART 2 Credits (2-0)
405-489

Teaching methods adjusted to age and ability groups in elementary and secondary schools. For art minors. (Semester)

AUDIO-VISUAL EDUCATION 2 Credits (1-2)
407-360

Methods of selecting and using audio-visual materials effectively in teaching. Experience in operating equipment, production of materials, practice in planning and presenting a lesson.

FILM: HISTORY AND APPRECIATION 3 Credits (3-0)
407-435

Traces the evolution of the motion picture film as a medium of mass communication and aesthetic expression; contributions of noted film producers are identified.

MOTION PICTURE PRODUCTION 2 Credits (1-3)
407-439

Prerequisites: 107-205, 407-360, or consent of instructor

Production of instructional sound motion pictures utilizing "live" projects which will be marketed. Production planning, content research, treatments, storyboard, script writing, shooting, editing, sound recording, titling, and other technical problems of production.

TELEVISION PRODUCTION TECHNIQUES 3 Credits (1-4)
407-493

Production of television programs in cooperation with students in 391-470, *Television Programming and Performance*. Each student will gain experience as director, technical director, cameraman, floor manager, audio controlman, telecine operator, and lighting director. Includes related technical information.

INSTRUCTIONAL COMMUNICATIONS SYSTEMS 2 Credits (2-0)
407-494

Application of electronic communications systems used to solve educational problems. Emphasis on audio systems including microphones, tape decks, and duplicators, paging systems, language labs and intercommunication equipment; multi-media systems including information retrieval, multiple response, and simulators; television systems and equipment.

INTRODUCTION TO TEACHING 3 Credits (2-1)
416-304

Prerequisites: 421-222, 421-303,
Overall grade point average—2.25

A methods course correlated with guided experiences involving directed observation and gradual assumption of teaching responsibilities in local schools. Includes the development of lesson plans and teaching aids. (Semester)

CURRICULUM DEVELOPMENT 5 Credits (10-0)
416-404

Prerequisite: 416-304, Overall grade point average—2.25

Development of an orderly procedure for the identification of concepts, generalizations and instructional units to be used in teaching. Course outlines; analysis of content; lesson planning; evaluation; management. (Quarter)

STUDENT TEACHING 8 Credits
416-408

Prerequisites: 416-404, 416-304 & 421-401

Directed teaching and community experiences in selected off-campus schools. (Quarter)

PRINCIPLES OF SECONDARY EDUCATION
421-222

2 Credits (2-0)
Prerequisite: 479-123

The evolution, status, and trends of secondary education. Needs of our democratic society: Philosophy, organizational problems, curriculum development, and the responsibilities of the individual teacher. (Semester)

INTRODUCTION TO GUIDANCE AND COUNSELING
421-401

2 Credits (4-0)

An overview of policies and practices of organized guidance programs for schools and colleges. Emphasis is given to the philosophy and evaluation of guidance, understanding the individual, counseling, and group guidance as it affects the classroom teacher and personnel worker. (Quarter)

PRINCIPLES OF VOCATIONAL-TECHNICAL AND
ADULT EDUCATION
421-402

2 Credits (4-0)

The philosophy, historical development, principles and practices, and organization of public vocational-technical and adult education in the nation. (Quarter)

HISTORY OF EDUCATION
421-405

2 Credits (2-0)

Elementary, secondary and higher education in the U.S. from the early colonial period to the present time. (Semester)

GUIDANCE IN THE ELEMENTARY SCHOOL
421-429

2 Credits (4-0)

The nature and conditions of guidance in the elementary school. Curricular and non-curricular guidance techniques, referrals, and parent counseling. Recommended principles and practices in guidance applied to the elementary school child. (Quarter)

EDUCATION EVALUATION
421-441

2 Credits (4-0)

Types of tests and test questions; the interpretation of test scores and grades by means of simple statistical procedures; methods of grading manipulative work and assigning final grades. (Quarter)

CONFERENCE LEADING
421-470

2 Credits (4-0)
Prerequisite: 449-304 or 442-304 or equivalent

Study and practice of the principles and techniques of conference leading as an instructional device in vocational and practical arts education. (Quarter)

COORDINATION
421-472

2 Credits (4-0)

Principles of coordination in vocational and adult education, including apprenticeship training, business education, distributive education, home economics, trade and industrial education, and diversified occupations. (Quarter)

PUBLIC RELATIONS

2 Credits (2-0)

421-479

Defines the public, objectives, and media of public relations in industry and education. Provides practice with such tools as news stories and features. Each student carries out an actual publicity program in the community. (Semester)

AMERICAN HIGHER EDUCATION

2 Credits (2-0)

421-481

An introduction to the ramifications of the American system of higher education including history, philosophy, administration, curriculum, students, teachers, and demands for employment. Undergraduates by permission of the instructor only. (Semester)

CIVIL DEFENSE EDUCATION

2 Credits (2-0)

421-487

Governmental, scientific, and moral aspects of civil defense with emphasis in curriculum enrichment, school emergency planning, and individual responsibilities. Certificates granted by the State Board of Vocational and Adult Education. (Summer session only)

PERSONAL LEARNING EXPERIENCE

3 Elective Credits

421-495

Prerequisites: Junior and Senior. By Permission

An experimental course for Juniors and Seniors. By permission only. Each student selects the learning experience he wishes to pursue. May be individual or group experience. Group meets with sponsor from time to time when requested by the students. Self-evaluation paper by each student is the only requirement. Learning experiences, both individual and group, organized and directed entirely by the students.

FIELD EXPERIENCE

2 Credits 10 Credits maximum

421-197, 297, 397, 497

(see page 20)

INDEPENDENT STUDIES

1 or 2 Credits

421-299, 399, 499

(see page 19)

RESTRICTED GRADUATE COURSES

421-500 Philosophy of Modern Education, 421-501 Research Procedures, 421-502 Principles of Supervision, 421-505 Social Thought of American Educators, 421-506 Problems of Supervision, 459-507 Introduction to Vocational Rehabilitation, 421-509 Problems in Teaching Vocational and Adult Education, 421-510 Applied Research, 421-511 Introduction to Student Personnel Services, 459-517 Occupational Analysis and Information, 459-521 Medical Aspects of Disability, 459-523 Procedures of Vocational Evaluation, 421-526 Administration, 421-527 Supervision of Student Teaching, 421-531 Problems in Guidance, 421-533 Survey Procedures, 421-538 Elementary School Curriculum, 421-539 High School Curriculum, 421-549 Organization and Administration of Student Personnel Work, 421-552 Group Guidance Procedures, 459-553 Procedures of Work Adjustment, 459-557 Man and Work, 421-561 Edu-

cational Statistics, 421-565 Organization and Administration of Guidance, 421-570 Thesis Plan A, 421-583 Vocational Evaluation Field Practice, & 421-599 Independent Studies are restricted to graduate students. See the Graduate College Bulletin for course descriptions.

INTRODUCTION TO TEACHING
442-304

3 Credits (2-2)

Prerequisites: 421-222, 421-303,
Overall grade point average—2.25

A methods course correlated with guided experiences involving directed observation and gradual assumption of teaching responsibilities in local schools. Includes the development of lesson plans and teaching aids. (Semester)

METHODS OF TEACHING HOME ECONOMICS
442-320

2 Credits (2-0)

Prerequisite or parallel: 421-303

—Not open to teacher education majors, etc.

Principles of teaching applied to the selection, organization, and development of home economics subject matter. For dietitians and other groups with specialized needs. (Semester)

CURRICULUM DEVELOPMENT

5 Credits (10-0)

442-404 Prerequisites: 442-304, Overall grade point average—2.25

Development of an orderly procedure for the identification of concepts, generalizations and instructional units to be used in teaching. Courses outlines: analysis of content; lesson planning; evaluation; management. (Quarter)

STUDENT TEACHING
442-408

8 Credits

Prerequisites: 442-404, 442-304 & 421-401

Directed teaching and community experiences in selected off-campus schools. (Quarter)

INTERNSHIP TEACHING
442-488

8 Credits

Prerequisites: 442-304 & 442-404

An alternate method of obtaining student teaching experience. Teacher interns receive a license to teach and salaried appointments in co-operating school systems for one full semester. (Semester). See page 118.

RESTRICTED GRADUATE COURSES

442-508 Curriculum Studies in Home Economics, 442-512 Home Economics for the Junior High School, 442-516 Evaluation in Home Economics Education, 442-518 The Woman in Today's World, 442-544 Seminars in Home Economics Education, & 442-575 Problems in Home Economics Education are restricted to graduate students. See the Graduate Studies Bulletin for course descriptions.

ACTIVITY ANALYSIS
449-234

2 Credits (4-0)

Study of analysis of activities for instructional purposes and for personnel work. Jobs operations, information topics, blocking, custom occupations, service occupations, checking level, progression factors defined. (Quarter)

INTRODUCTION TO TEACHING

3 Credits (4-4)

449-304

Prerequisites: 421-222, 421-303,
Overall grade point average—2.25

A methods course correlated with guided experiences involving directed observation and gradual assumption of teaching responsibilities in local schools. Includes the development of lesson plans and teaching aids. (Quarter)

METHODS OF TEACHING INDUSTRIAL EDUCATION

2 Credits (4-0)

449-305

Prerequisite: 421-303

Study of Teaching methods in use in youth and adult shop classes. Instruction planning; methods of organization and management; instruction aids; professional ethics. (Quarter)

CURRICULUM DEVELOPMENT

5 Credits (10-0)

449-404

Prerequisites: 449-304 or 449-305,
Overall grade point average—2.25

Development of an orderly procedure for the identification of concepts; generalizations and instructional units to be used in teaching. Course outlines; analysis of content; lesson planning; evaluation; management. (Quarter)

STUDENT TEACHING

8 Credits

449-408

Prerequisites: 449-304, 449-404 & 421-401

Directed teaching and community experiences in selected off-campus schools. (Quarter)

TECHNICAL EDUCATION PROGRAMS

2 Credits (4-0)

449-415

Prerequisite: Senior or Graduate Study

Philosophy, principles, operation, and structure of technical education programs at the post-high school level. (Quarter)

SHOP PLANNING AND EQUIPMENT SELECTION

2 Credits (4-0)

449-433

Prerequisite: 449-404 or equivalent

Principles of school shop planning including equipment selection and placement, plus selection, care, arrangement of supplies. (Quarter)

SCHOOL SHOP ORGANIZATION AND MANAGEMENT

2 Credits (2-6)

449-437

Prerequisites: 449-304 & 449-305

Experience in administration, project development and teaching problems associated with industrial education. (Quarter)

PROBLEMS IN TEACHING TRADE, TECHNICAL
AND INDUSTRIAL SUBJECTS

2 Credits

449-443

Prerequisite: 449-305 or equivalent

Individual work following approved practice in the development of instructional material for vocational-technical and adult teaching. (Extension)

INTERNSHIP TEACHING

8 Credits

449-488

Prerequisites: 449-304 or 449-305 & 449-404

An alternate method of obtaining student teaching experience. Teacher interns receive a license to teach and salaried appointments in co-operating school systems for one full semester. (Semester)

ADMINISTRATION OF VOCATIONAL, TECHNICAL AND
ADULT EDUCATION
449-492

2 Credits (4-0)

Vocational-technical and adult school operation, legal status, policy making, staff personnel, student personnel, programs, public relations, physical plant, business management. (Quarter)

RESTRICTED GRADUATE COURSES

449-504 History of Industrial Education, 449-546 Seminars in Industrial Education & 449-568 Curriculum Procedures II are restricted to graduate students. See the Graduate Studies Bulletin for course descriptions.

INTRODUCTION TO TEACHING PRESCHOOL EDUCATION 3 Credits (3-0)
477-304 Prerequisites: 212-324 & 212-326

Introduction to preschool education movement and overview of philosophies and administration of different types of programs. (Semester)

CURRICULUM DEVELOPMENT IN PRESCHOOL EDUCATION 3 Credits (2-2)
477-404 Prerequisites: 212-349 & 477-304

Philosophy of preschool education and methods of curriculum planning for the preschool child. (Semester)

STUDENT TEACHING AT PRESCHOOL LEVELS 9 Credits
477-408 Prerequisites: 477-404 & Consent of Instructor

At least 120 hours of supervised student teaching at the nursery school level including children age two to four and at least 120 hours on the kindergarten level with children age five. Participation is based on at least a two to three hour session in direct contact with children plus additional time set for staff conferences. (Semester)

EDUCATION — PROFESSIONAL TEACHER EDUCATION — AMERICAN INDUSTRY

To qualify for teacher education in American Industry, students must have a grade point average of 2.25 at the time they enter 401-205A, Professional Teacher Education Seminar, and must maintain this average through 401-205G, Student Teaching. They must also have approval from the Health Department. If a physical examination blank signed by a physician is properly filled out, and on record in the office of the Health Department, and no known health problems exist, this approval is automatically provided by the school nurse who sends a signed form to the Vice-President for Student Personnel Services. Individuals facing special and temporary problems in health may apply for admission to the Student Personnel Committee for Teacher Education.

Students wishing to qualify for teacher education, must show proficiency in English by earning a "C" in the last course in English Composition or having a transfer record of "C" in such a course from another accredited college or university. If a deficiency exists, a student may elect to do remedial work in English to earn a "C" in the final examination of 102b, or earn a qualifying score on the Cooperative English Test administered by the University Counseling Center.

Students entering teacher education must also present evidence of speech proficiency. The speech requirement must be met before taking 401-205d, Professional Teacher Education Seminar. All students are rated in the required speech course as to their proficiency. Those rated as unsatisfactory are required to enroll in Speech 100, Speech Improvement, a non-credit course, until they are approved for teaching.

The prospective American Industry teacher will receive teaching experience and theory in the Professional Teacher Education Seminar (401-205a, 401-205b, 401-205c, 401-205d, 401-205e, and 401-205f). This sequence starts in the second semester of the freshman year and continues through the first semester of the senior year. The Professional Teacher Education Seminar consists of both a teaching laboratory and a professional seminar. The teaching laboratory provides controlled video-taped, and evaluated teaching experience with small groups of secondary school students. The professional seminar provides the student with substantive knowledge and theory in those areas of study typically assigned under the heading of: educational psychology, adolescent psychology, sociology of education, introduction to teaching, history of education, philosophy of education, curriculum and course construction, and methods of teaching. Combining the laboratory and seminar permits an integration of theory and practice. AI 205g, student teaching, is to be taken in the second semester of the senior year. 401-205a, 205b, 205c, 205d, 205e, 205f, Professional Teacher Education Seminar, 2 credits per semester, 12 credits total.

Prerequisite: Enrollment in American Industry curriculum by consent of American Industry staff.

A continuing seminar and teaching laboratory. Provides substantive information and guidance for the developing teacher. Development of the teacher role and controlled practice in teaching.

401-205g, Student Teaching.

Prerequisites: 401-205a, 205b, 205c, 205d, 205e, 205f.

Directed teaching and community experiences in selected off-campus schools.

PSYCHOLOGY (79)

THE MINOR (Liberal Arts)—22 Semester Credits

Required Courses: 11 semester credits including 479-123, 479-214 or 479-431, 354-130 or 479-490, 479-352 or 479-350.

Courses From Which to Select 11 Semester Credits: 479-263, 479-303, 479-358, 479-366, 387-350, 387-420, 479-430, 479-432, 479-435, 479-475, 479-491, 479-326, 479-199, 479-299, 479-399, 479-499, 479-197, 479-297, 479-397, 479-497.

THE MINOR (Preschool Education)—22 Semester Credits

Required Courses: 11 semester credits including 479-123, 479-214, or 479-431, 354-130 or 479-490, 479-352 or 212-234.

Courses From Which to Select 11 Semester Credits: 212-235, 479-263, 479-303, 212-324, 212-326, 212-349, 387-350, 479-358, 479-366, 387-420, 212-424, 479-430, 479-432, 479-435, 212-435, 212-437, 479-475, 212-307, 479-491, 479-199, 479-299, 479-399, 479-499, 479-197, 479-297, 479-397, 479-497, 479-326.

GENERAL PSYCHOLOGY
479-123

3 Credits (3-0)

Scientific versus unscientific approaches in understanding behavior. Efficient study methods, individual differences, motivation, emotions, personality development, thinking, and psychological problems of college, community, and vocational life. (Semester)

PERSONALITY AND MENTAL HEALTH
479-214

3 Credits (3-0)

Preventing the development of problems in adjustment with training in early recognition. Applying positive principles of mental hygiene. Factors that contribute either to a normal personality or to maladjustment. (Semester)

EXPERIMENTAL PSYCHOLOGY
479-263

3 Credits (3-0)

Performance of some of the simpler experiments together with a study of the more important investigations. The presentation of quantitative data and the interpretation of their larger significance. Individual and group experiments in perception, sensation, reflex action, emotion and learning. (Semester)

EDUCATIONAL PSYCHOLOGY
479-303

2 Credits (2-0)

Prerequisite: 479-123

Child and adolescent development, learning and its guidance, the individual student, and the implications of interests and attitudes. (Semester)

THE PSYCHOLOGY OF MARRIAGE AND THE FAMILY
479-326

2 Credits (2-0)

A study of the interpersonal relations involved in dating, mating, and family collaboration with growing awareness of patterns for self-integration. (Semester)

ADOLESCENT PSYCHOLOGY
479-350

3 Credits (3-0)

Prerequisite: 479-123

The physical, emotional, social, moral, and intellectual development of secondary school youth. (Semester)

CHILD PSYCHOLOGY
479-352

3 Credits (3-0)

Prerequisite: 479-123

Psychological development of children. Emphasis on age groups spanning the pre-school and the pre-pubescent child; methods for scientific measurement and understanding of child behavior. (Semester)

DIFFERENTIAL PSYCHOLOGY
479-358

3 Credits (3-0)

Nature and extent of differences in individuals and groups. Intelligence, achievement, aptitudes, interests, attitudes, and general personality. Race, sex, nationality, social class and age in relation to individual differences. (Semester)

PSYCHOLOGY OF LEARNING
479-366

3 Credits (3-0)

A course designed to acquaint the student with the principles of learning drawn from experimental and theoretical psychology. These principles will be demonstrated as they apply to animal and human learning. Modern viewpoints toward theories of learning will be emphasized. (Semester)

INDUSTRIAL PSYCHOLOGY
479-430

2 Credits (2-0)

Prerequisite: 479-123

Use of Psychological methods in personnel management in industry. Emphasis is on personnel policy formation and techniques in placement, interviewing, efficiency, job evaluation and training, merit rating, morale, and safety. (Semester)

ABNORMAL PSYCHOLOGY
479-431

3 Credits (3-0)

A study of more serious mental disturbances. Emphasis on the growing importance of mental disorders and on their early detection and referral. (Semester)

PSYCHOLOGY OF THE EXCEPTIONAL CHILD
479-432

2 Credits (4-0)

Guidance of the learning and development of children who deviate from the normal, the mentally retarded, gifted, socially and emotionally disturbed, and those with visual, speech, and orthopedic problems. (Quarter or Semester)

PERSONNEL MANAGEMENT
479-435

3 Credits (3-0)

Organization and coordination of personnel practices and methods. Consideration given to communication, employment, orientation and training, working conditions, supervision, performance evaluation, collective bargaining, salary administration, health and recreation. (Semester)

HUMAN RELATIONS IN THE COMMUNITY
479-455

2 Credits

Consideration of the social, psychological, medical, physical, spiritual and interpersonal aspects of growing into responsible adulthood. (Summer Session only)

COUNSELING THEORY
479-475

2 Credits (4-0)

Prerequisites: 421-401 or, 421-429 or, 212-324,
Senior or Graduate Standing

Psychological study of the interview. Consideration given to various interview objectives, points of reference, kinds of questions, and the improvement of techniques for various purposes of the teacher and counselor. (Quarter)

APTITUDE AND ACHIEVEMENT APPRAISAL 2 Credits (4-0)
479-490 Prerequisites: 421-401 or, 421-429 or, 212-324,
Senior Status

Selection, interpretation, and use of tests and inventories for teachers and counselors. Study of achievement, aptitude, interest and personality tests with experience in the interpretation of results. (Quarter)

PSYCHOLOGY OF CAREERS 2 Credits (4-0)
479-491 Prerequisite: Senior or Graduate Standing

Occupational and educational opportunities. Evaluation of information sources, occupational requirements, trends, and uses. (Quarter)

FIELD EXPERIENCE 2 Credits 10 Credits Maximum
479-197, 279, 397, 497

INDEPENDENT STUDIES 1 or 2 Credits 10 Credits Maximum
479-199, 299, 399, 499

RESTRICTED GRADUATE COURSES

479-513 Personality, 459-526 Psycho-Social Aspects of Disability, 479-534 The Technical-Vocational Education Student, 479-536 The American College Student, 459-538 Psychiatric and Intellectual Aspects of Disabilities, 479-541 Individual Mental Testing, 479-543 Advanced Individual Mental Testing, 479-545 Assessment of Personality (Projectives), 479-548 Diagnosis and Remediation of Learning Difficulties, 479-550 Appraising the Individual, 479-555 Advanced Psychology of Learning, 479-574 Supervised Internship in Student Personnel Services, 479-590 Supervised Clinical Practicum, 479-595 Clinical Practice in Educational Diagnosis, & 479-599 Independent Studies are restricted to graduate students. See the Graduate Studies Bulletin for course descriptions.

STUDENT SERVICES

Housing

Motor Vehicle Registration

Attendance and Military Obligation

Financial Aids Available

Fall Orientation

Advisement

Veterans' Service

Placement

Student Activities

STUDENT SERVICES

Student Services embraces all of the organized efforts, other than classroom instruction, that are designed to make student life an experience which is social as well as individual, and personal as well as intellectual. It attempts to apply education to all areas of living.

HOUSING

The university will provide residence hall accommodations for approximately 2,650 students for the fall of 1967. Two residence hall areas are located on the campus. The north residence hall complex, composed of Jeter-Tainter-Callahan Hall, Fleming Hall, and Hovlid Hall, accommodates approximately 700 students. Students of this complex receive their meals in the Tainter Food Service which is located in Jeter-Tainter-Callahan Hall. This dining hall overlooks beautiful Lake Menominee. The south residence hall complex, composed of Antrim-Froggatt-McCalmont Hall, Curran-Kranzusch-Tustison Hall, Hansen-Keith-Milnes Hall, North Hall and South Hall, accommodates approximately 1,950 students. This complex has a separate food service facility for meal service.

Students residing in residence halls are required to contract for their meals in the food service facilities as provided. The meal contract plan provides for 21 meals per week.

Rooms in the residence halls are available on the Sunday immediately preceding registration day in the fall. All rooms are assigned for the entire academic year. Each room is furnished with single beds and inner-spring mattresses, pillows, dresser, study table, chairs, study lamp, and bookcase. Sheets, pillow cases, drapes, and bedspreads are supplied. Students are requested not to bring additional furniture, particularly floor lamps. Radios are permitted in the rooms provided the students comply with the regulations for radios. Television sets are available for general use in the main lounge of each building.

If a student vacates his room in the residence hall prior to the end of the period of his contract, his money will be partially-refunded according to the policy outlined in the general information section of this catalog.

The required housing deposit will reserve a room in one of the residence halls and will be applied against the final payment for the second semester of the academic year. The housing deposit will not be refunded if cancellation for the first semester of the academic year is received after August 1 and if cancellation for the second semester of the academic year is received after January 1.

The Board of Regents of the Wisconsin State University System requires that all students under the age of 21 years except students who are married, or commute to classes from their homes may be required to reside in university-operated residence halls if space is available.

Students eligible to live in private housing in the city of Menomonie may secure information about accommodations in the city from the Student Housing Office.

At the present time, Stout State University has approximately 66 married-student apartments. These are barracks-type units with two bedrooms, a bath, a kitchen alcove, a living room and limited storage

space. These units may be rented furnished or unfurnished. Married-student facilities are also available in the community of Menomonie. Inquiries for student housing should be directed to the Director of Student Housing, Stout State University.

REGULATIONS CONCERNING MOTOR VEHICLES

Motor vehicles are to be brought to the campus by students only in case real need for such transportation is felt. As parking facilities on or near the campus are very limited, students who expect to use University owned or controlled parking lots must register their vehicles and observe the regulations issued by the Security Office.

COLLEGE ATTENDANCE AND MILITARY OBLIGATIONS

Men registered with the Selective Service System must keep their local boards informed of their student status if they wish to request a student deferment. The Registrar's Office has the required forms for requesting such a deferment. It is the student's responsibility to initiate the form.

Menomonie maintains a unit of the Wisconsin National Guard. Many students attending Stout belong to this unit.

It is possible for a man who joins a national guard unit and who then attends that unit's weekly drills to be exempt from the selective service. A student who belongs to another guard unit within Wisconsin can continue his drill in Menomonie and still maintain the military status which he had while at home. Persons in national guard units in other states can make somewhat similar arrangements.

THE FINANCIAL AIDS PROGRAM

Financial aids are awarded to students who without such aid would be unable to attend Stout State University. Applications for financial assistance are based upon the applicant's need, scholastic promise and qualities of leadership. Financial aids are awarded by the University Financial Aids Committee.

HOW TO APPLY FOR FINANCIAL AIDS

Students can obtain the appropriate financial aids form by writing to the Director of Financial Aids. The following guide-lines govern the awarding of financial aids:

1. Students may request financial aid only after they are fully accepted by the Admissions Department.
2. Scholarship applications should be received prior to March 1.
3. Most financial assistance is awarded by the semester or by the academic year.
4. Awardees of financial assistance (scholarships, loans, and part-time employment) are required to make a new application each year if financial aid is desired.

THE NATIONAL DEFENSE STUDENT LOAN FUND

To be eligible for a National Defense Student Loan a student must:

1. Be accepted or enrolled at Stout.
2. Be in need of financial assistance.
3. Maintain a cumulative grade point average of 2.25 or rank in the upper 40% of their high school graduating class.

Eligible students may be granted up to \$700 for each year while attending Stout. The amount of the loan is determined by the availability of funds and the student's financial need.

Repayment must be completed within a ten-year period at an interest rate of 3% per annum, to begin one year after the borrower ceases to be a student. Up to 50% of a loan (plus interest) will be forgiven if the borrower becomes a full-time professional teacher. Teacher cancellation is to be at a rate of 10% a year up to five years.

WISCONSIN STATE STUDENT LOAN FUND

The Wisconsin State Student Loan is available to students:

1. Who are residents of Wisconsin.
2. Who are in need of the loan assistance.
3. Who have a minimum high school grade average of "C".

There is no interest charged while attendance at Stout, and a 3% rate of interest beginning nine months after the individual ceases to be a student at Stout.

The maximum amount of this loan for an academic year is \$1,000.00 and \$250.00 for the summer session.

THE STOUT STATE UNIVERSITY LOAN FUND

This loan fund is a non-profit organization that is supported by funds received from alumni, student organizations, faculty, civic leaders, Menomonie Area Businessmen, and the Stout State University Foundation, Inc. This loan fund is available for short-term emergency loans to students. The maximum amount loaned is \$100.00 and the full repayment should be completed within 90 days.

THE WORK STUDY PROGRAM

The Federal Economic Opportunity Act provides employment for qualified students. To be eligible for work-study financial assistance at this university, the student must be from a low income family; a citizen or national of the U.S.; need the job in order to study at this university; and be capable of maintaining acceptable academic grades.

A student employed under this program may work a maximum of 15 hours per academic week and 40 hours a week during other periods such as vacations and summer recess.

A number of work-study jobs are available to qualified students. Applications can be obtained from the Director of Financial Aids.

ON-CAMPUS EMPLOYMENT

Varied competences are required by academic departments, maintenance departments, food services, recreational center, and other campus agencies. Students are placed with regard to their skills and ability to fulfill these requests.

OFF-CAMPUS EMPLOYMENT

A number of job opportunities are available to students by Menomonie Area employers. Academically promising students who meet the specific job requirements of an employer are referred to the employer for a personal interview.

ECONOMIC OPPORTUNITY GRANT

Grant awards of \$200-\$800 per academic year are available to students. The maximum amount the student may receive is limited by the amount of parental support.

LEADERSHIP AND NEED SCHOLARSHIPS

Leadership Scholarships are based on leadership qualities as well as academic records and need for financial assistance. The amounts will vary with financial need, with the maximum of two-thirds of the amount needed in addition to the family contribution for the school year.

INFORMATION IS AVAILABLE

Additional information concerning financial aid and part-time employment can be obtained by writing to:

Director of Financial Aids
Stout State University
Menomonie, Wisconsin 54751

FALL ORIENTATION FOR FRESHMEN

A major project during the first week of school is to help new students become accustomed to living on a university campus. During the week a series of activities are planned to accomplish this goal. The outstanding event is *Grappling With Ideas*, which begins with a convocation where the President of Stout State University sets the mood for the academic climate. This is followed by discussion sessions where students meet in small groups with a faculty member for two evenings to discuss very informally the intellectual environment of a university. Other activities include a convocation at which many of the special services provided by the university to students are outlined and discussed. Blended into the business at hand is a pleasant mixture of recreational activities including a sports spree conducted at the Physical Education Center, two dances, and a picnic for all new students. Meetings in residence halls, coffee parties, pleasant contacts with upperclassmen, and other planned activities all combined with the other events provide the new student with the impetus for the successful beginning of a university education.

ADVISERS

The foundation of the student personnel work is laid in the day-to-day contacts between teachers and students. The Deans of the Schools of Home Economics, Applied Science and Technology, Liberal Studies, Graduate College, and the School of Education administer the programming of students. The deans are assisted by faculty advisers.

VETERANS SERVICE

Special assistance is given veterans by the Registrar. This office provides veterans with current information on veterans affairs and maintains liason with the Veterans Administration, Department of Veterans Affairs, and the County Veterans Service Officers.

PLACEMENT

Registration for placement is a requirement for graduation. Essentially, this involves completing various placement forms and securing references from a specified number of reference persons.

The placement office is maintained to provide service to seniors, graduate students, and alumni. The goal of the placement office is to give effective support to the placement efforts each individual is expected to make in securing the position best for him. Every effort is made to bring to the attention of candidates for placement information about vacancies, trends in supply and demand, data about salaries and conditions of employment, and to recommend effective application techniques.

Alumni are advised to keep their placement credentials updated and to make free use of the service available to them when they desire to relocate.

Through the years, Stout graduates have earned a very high reputation. This in turn has enabled the placement office to maintain an enviable record. To graduate from Stout with a good record and recommendations is to be assured of unlimited employment opportunities.

STUDENT ACTIVITIES

All extra-curricular activities at Stout State University are considered to be a part of the over-all educational process. These activities are geared to the growth and development of the individual students. Through the various boards, committees, and staff, the University provides a cultural, social, and recreational program which is a cooperative factor toward achieving the objective of a complete education. In all these programs, encouragement is given to self-directed activity which gives maximum opportunity for self-evaluation and growth in social competency and group effectiveness. Such programs also serve as a laboratory for citizenship, training students in social responsibility and for leadership in our democratic society. Thus the development of the person as well as the intellect is effected.

The Lyceum series bring to our campus talents of national and international renown in the form of guest lecturers, singers, symphonies, singing or acting groups, and so forth which adds a cultural atmosphere for relaxing enjoyment. The Stout Student Association sponsors various forms of wholesome entertainment such as dances, singing groups, and special weekends which include Homecoming and Winter Carnival. The Student Center, through its program of films, lecturers, entertainment, and recreation adds to the social, recreational development of the student. In addition, a recreational and intramural program is sponsored by the physical education department. Many other programs are provided by other groups on campus.

There are more than 70 organizations which are university affiliated. This number includes fraternities, sororities, religious groups, special interests, service organizations, and honorary societies. Such a vast array of organizations provides a broad spectrum of interests in which every student is encouraged to participate.

THE MEMORIAL STUDENT CENTER

The Director of Student Activities is responsible for the general operation and supervision of the Student Center. The Student Union Board composed of faculty members and representatives of the student body acts as an advisory organization in the area of programming and policy making. The informal atmosphere of the Student Center provides for rich enjoyable experiences of lectures and cultural events, social programs, and informal gatherings. The facilities of the Student Center include a cafeteria, snack bar, ballroom, offices, bookstore, meeting rooms, and a recreation room which features the latest in bowling and recreational equipment.

STUDENT GOVERNMENT

The Student Senate of the Stout Student Association is the student government body and consists of elected representatives from the entire student body. The Dean of Men, Dean of Women, and Director of Student Activities serve as advisors to this organization. It assumes considerable responsibility in helping to promote the objectives and goals of the University. The Student Senate has become a vital part of the University and provides for students a valuable experience in leadership and citizenship training.

PUBLICATIONS

The *Stoutonia* is the student weekly newspaper. This publication offers opportunity for experience in printing, writing, photography, editing, and advertising. The University annual, the TOWER, is another fine student publication which offers considerable opportunity for experience during the entire productive process throughout the year. The Stout Literary Club publishes artistic and literary works of students at least once each year. Such a publication stimulates students to utilize their creative abilities.

DRAMATICS

Alpha Psi Omega, a national dramatic fraternity, and the University Theatre group present several plays each year. Students participate not only in the acting in all phases of play production, including scene construction, staging and lighting.

FORENSICS

The opportunity for intercollegiate forensics competition in oral interpretation, oratory, extemporaneous and public speaking is offered to the students. The Wisconsin Kappa Chapter of Pi Kappa Delta, a national forensic fraternity, sponsors an invitational tournament and other events throughout the year.

MUSIC

The Stout Concert Band and the Stout Symphonic Singers have received acclaim throughout Wisconsin and from other parts of the nation. Band activities include concerts, parades, football game shows, pep band appearances, and concert tours. The Stout Symphonic Singers have received many plaudits including a commendation from the Wisconsin General Assembly for their performances. Concert tours highlight the activities of the group. Glee Club, vocal and instrumental ensembles, in addition to solo performances, enrich the musical performance program on our campus.

HONORARY PROFESSIONAL ORGANIZATIONS

A number of Honorary Professional Fraternities and Sororities are chartered at Stout. These organizations supplement the specialized academic area with programs originating on a local or national level and disseminating the latest technical information available.

PROFESSIONAL AND EDUCATIONAL CLUBS

These organizations offer opportunity for professional growth. In most instances these organizations provide practical experience opportunities which supplement the academic interests of the students.

INTERNATIONAL RELATIONS

Since Stout is a leader in the field of Industrial Education and Home Economics on an international level, students from many countries attend the university. With such a background of diverse cultures, these people enrich the student body by their association and exchange of ideas for our students. There are two organizations, International Relations Club and the People to People Program, offering greater opportunity to pursue international interests and associations on a more personal basis.

INTEREST GROUPS

A number of organizations on campus are chartered with the purpose of meeting the extra curricular interests of the students, though they may not necessarily be supplemental to the students' academic programs. Such organizations are political clubs, recreational organizations, hobby groups, and other organizations which offer students the opportunity to continually develop their specific interests.

SOCIAL FRATERNITIES AND SORORITIES

The social fraternities and sororities at Stout contribute to the social life and experiences of their members and also provide specific leadership experiences for them. In addition, the programming of these organizations are geared to further enhance the over-all goals and objectives of the university.

RELIGIOUS ORGANIZATIONS

Student groups which represent the different and diverse religious preferences of the student body are organized and pursue active programs with their respective churches. All these groups have repre-

sensation on the Inter-Religious Council which plans annual programs for the benefit of all students regardless of creed. The aim of the council is to stimulate religious development, coordinate student religious activities, and promote an understanding within the University community that religion plays an important part of the educational processes in our democratic society. At present a non-profit organization is planning an ecumenical center for the University students in the immediate vicinity of the Stout campus.

SERVICE ORGANIZATIONS

While many organizations on campus perform services for the students and for the University in general, Alpha Phi Omega Fraternity and the Gamma Sigma Sigma Sorority have as their main objective service to the University community; they participate in many official events on campus.

ATHLETICS, SPORTS, AND RECREATIONAL ACTIVITIES

The athletic program at Stout State University exists for the contribution it makes to the total educational program. For the participants it provides general educational values and constitutes a laboratory for those who aspire to participation in coaching.

Intercollegiate athletics are under the direction of the Faculty Committee on Athletics. Stout State University is a member of the Wisconsin Athletic Conference and the National Association of Intercollegiate Athletics and is committed to the objectives and regulations of these organizations. The University has varsity teams in intercollegiate competition in baseball, basketball, football, golf, gymnastics, tennis, and wrestling. A bowling team which competes in the Wisconsin State University Bowling League is under the jurisdiction of the Student Center. The "S" Club is a campus organization for men who have earned letters in intercollegiate sports.

Intramural Athletics is considered an important part of the overall recreational opportunities for students. Programming is offered in a number of sports such as football, basketball, wrestling, and swimming. In addition, ample opportunity is provided for individual and group athletics during the many hours of open recreation in the Physical Education Building.

PERSONNEL DIRECTORY

Board of Regents of Wisconsin State Colleges

Coordinating Committee for Higher Education
in Wisconsin

Board of Visitors

Administration Staff

Faculty

Organizational Memberships

BOARD OF REGENTS WISCONSIN STATE UNIVERSITIES

(AS OF MARCH, 1967)

Five Year Term Expires Feb. 1

Eugene W. Murphy, La Crosse, President	1973
Robert L. Pierce, Menomonie, Vice President	1970
Stephen Ambrose, Whitewater	1972
David H. Bennett, Portage	1971
Norman L. Christianson, Roberts	1969
John J. Dixon, Appleton	1969
Allan L. Edgerton, Fond du Lac	1972
W. Roy Kopp, Platteville	1970
Milton Neshek, Elkhorn	1970
James A. Riley, Altoona	1973
Siinto S. Wessman, Superior	1971
Mrs. Robert R. Williams, Stevens Point	1970
Eugene R. McPhee, Madison, Secretary and Director of Wisconsin State Universities.	
William C. Kahl, State Superintendent of Public Instruction (ex-officio).	

STATE COORDINATING COMMITTEE FOR HIGHER EDUCATION

(AS OF JULY, 1967)

Thomas Cheeks	Milwaukee
G. Kenneth Crowell	Neenah
Arthur DeBardeleben	Park Falls
Charles D. Gelatt	West Salem
William C. Kahl	Madison
Walter J. Kohler	Sheboygan
Harold A. Konnak	Racine
W. Roy Kopp	Platteville
William Kraus	Stevens Point
Philip E. Lerman	Milwaukee
Eugene W. Murphy	La Crosse
Joseph Noll	Kenosha
Frank H. Ranney	Milwaukee
John D. Rice	Sparta
John Roche	Rio
C. O. Wanvig, Jr.	Milwaukee
Arthur E. Wegner	Madison

BOARD OF VISITORS FOR INDUSTRIAL EDUCATION

The Board of Visitors is an organization of industrial leaders who contribute of their time and abilities to assist Stout State University in fulfilling its educational mission. Specific responsibilities of the board include fostering closer cooperation between industry and the university, providing counsel and advice regarding industrial and home economics education and industrial technology curricula, and informing the university of the kind of graduate needed by industry.

MEMBERS OF THE BOARD OF VISITORS

- C. W. Chatterson, Factory Manager, United States Rubber Co., Eau Claire
- R. G. Commo, Industrial Relations Manager, Giddings and Lewis Machine Tool Co., Fond du Lac
- J. R. Freyermuth, President, Northwest Plastics, Inc., St. Paul, Minnesota
- Clarence L. Greiber, Director, State Board of Vocational, Technical and Adult Education, Madison
- Ken Haagenon, Secretary, Wisconsin State Chamber of Commerce, Madison
- Carleton C. Hitchcock, President, R. C. Hitchcock and Sons, Inc., Minneapolis, Minnesota
- W. H. Keland, Wisconsin River Development Corp., Racine
- George Kurten, Personnel and Training Director, Western Printing and Lithographing Co., Racine
- John W. Schmitt, President, Wisconsin A.F.L.-C.I.O., Milwaukee
- Dorr Snoyebos, Director of Personnel, A. C. Electronics Division of General Motors, Milwaukee
- Robert H. Strenger, International Representative, United Brotherhood of Carpenters and Joiners of America, Madison
- J. L. Wiggins, Executive Vice President, Automotive Service Industry, Chicago, Illinois
- John R. Wrage, President, Industrial Management Consultants, Inc., Madison

UNIVERSITY ADMINISTRATION

WILLIAM J. MICHEELS, PH.D.	President
JOHN A. JARVIS, PH.D.	Vice President for Academic Affairs
RALPH G. IVERSON, ED.D.	Vice President for Student Services
JOHN FURLONG, PH.D.	Vice President for University Relations and Development
E. J. SCHOEPP, A.B.	Vice President for Business Affairs
DWIGHT L. AGNEW, PH.D.	Dean, School of Liberal Studies
HERBERT A. ANDERSON, ED.D.	Dean, School of Applied Science and Technology
ERICH R. OETTING, PH.D.	Dean, School of Education
AGNES S. RONALDSON, ED.D.	Dean, School of Home Economics
ROBERT S. SWANSON, PH.D.	Dean, Graduate College
MERLE M. PRICE, M.A.	Dean of Men
FREDA M. WRIGHT, M.A.	Dean of Women
HELMUTH ALBRECHT, B.S.	Director of Housing
FRANK J. BELISLE, M.A.	Director of Placement
PHYLLIS D. BENTLEY, M.S.	Librarian
GERALD DONLEY, M.S.	Coordinator of School Relations
PAUL GOEDE	Food Service Director
PAUL R. HOFFMAN, ED.D.	Director of the Counseling Center
JOSEPH M. LARKIN, ED.D.	Director of Financial Aids
ANGELO ORTENZI, ED.D.	Director of Student Activities and Student Center
DONALD OSEGARD, B.A.	Director of Admissions
LOUIS RODEY, M.S.	Superintendent of Buildings and Grounds
LLOYD TRENT, M.S.	Director of Development and Alumni Services
SAMUEL WOOD, M.A.	Registrar

UNIVERSITY FACULTY

- William J. Micheels (1961) *President*
Stout State University, B.S.; University of Minnesota, M.A., Ph.D.
- Dwight L. Agnew (1947) *Dean of the School of Liberal Studies, Professor*
Park College, A.B.; University of Iowa, A.M., Ph.D.
- John A. Alberty (1966) *Instructor, Art*
Wichita State University, B.A., M.F.A.
- Helmuth Albrecht (1963) *Faculty Assistant, Director of Housing*
Stout State University, B.S.
- William D. Anthor (1960) *Chairman of the Department of Industrial Graphics, Professor*
Stout State University, B.S., M.S.; University of Minnesota, Texas Agricultural and Mechanical University, Ed.D.
- Herbert A. Anderson (1948) *Dean of the School of Applied Science and Technology, Professor*
Stout State University, B.S.; University of Minnesota, M.A.; University of Missouri, Ed.D.
- Orrin R. Anderson (1966) *Faculty Assistant, Speech*
University of Denver, B.S.; University of Minnesota, B.S.
- Richard E. Anderson (1967) *Assistant Professor, Assistant Registrar*
Stout State University, B.S., M.S., Colorado State College, Ed.D.
- Douglas B. Archard (1966) *Faculty Assistant, Social Science*
State University College, Plattsburgh, N.Y., B.S.
- Herman C. Arneson (1945) *Associate Professor, Biology*
Northland College, B.A.; University of Minnesota, M.A., Graduate Study
- Mehar C. Arora (1965) *Assistant Professor, Industrial Technology*
Delhi University, B.A., Punjab University, M.A.; University of Minnesota, M.S.
- Paul A. Axelsen (1956) *Assistant Professor, Graphic Arts*
Stout State University, B.S., M.S.; University of Minnesota, Graduate Studies
- Willard Fee Bailey, Jr. (1966) *Assistant Professor, Sociology*
University of Minnesota, B.A., M.A.
- Robert W. Baldwin (1967) *Assistant Professor, Wood Technics and Plastics*
Northwest Missouri State Teachers College, B.S.; Kansas State College of Pittsburg, M.S.
- David P. Barnard (1947) *Chairman of Department of Audio-Visual Education, Director of Audio-Visual Center, Professor*
Stout State University, B.S., M.S.; Indiana University, Ed.D.

- Kenneth T. Becker (1966) *Instructor, Mathematics*
St. John's College, B.A.; University of Notre Dame, M.A.
- Frank J. Belisle (1955) *Associate Professor, Director of Placement*
Wisconsin State University—River Falls, B.Ed.; University of Minnesota, M.A.
- M. James Bensen, (1966) *Assistant Professor, Industrial Teacher Education*
Bemidji State College, B.S.; Stout State University, M.S.; Pennsylvania State University, D.Ed.
- Phyllis D. Bentley (1954) *Librarian, Associate Professor*
University of Wisconsin, B.A.; Columbia University, M.S.
- David A. Beveridge (1956) *Instructor, Audio-Visual Education*
Stout State University, B.S., M.S.
- James Bjornerud (1964) *Assistant Professor, Wood Technics and Plastics*
Bemidji State College, B.S.; Ohio University, M.Ed.; University of Minnesota, Graduate Study
- Frederick Blake (1959) *Instructor, Chemistry*
Ripon College, B.A.; University of Minnesota, M.S.
- Gerald R. Boardman (1965) *Assistant Professor, Mathematics*
Wisconsin State University, Eau Claire, B.S.; Colorado State University, M.S.; Louisiana State University, University of Nebraska, Graduate Study
- Haukur Bodvārsson (1967) *Assistant Professor, English*
University of Minnesota, B.A., M.A., Graduate work
- Karen E. Boe (1964) *Assistant Professor, English*
Augustana College, St. Olaf College, B.A.; University of Wisconsin, M.A.; Northwestern University, University of Wisconsin, Graduate Study
- Dennis P. Bolstad (1961) *Professor, Education and Psychology*
St. Olaf College, B.A.; Macalaster College, M.Ed.; University of Colorado, Ed.D.
- Todd A. Boppel (1963) *Instructor, Art*
University of Wisconsin, Milwaukee, B.S., M.S.
- Fred C. Breisch (1966) *Associate Professor, Mathematics*
University of Michigan, A.B. Ed., A.M.
- Lois E. A. Byrns (1960) *Professor, Chairman of Department of English*
University of Wisconsin, B.A., M.A., Ph.D.; Columbia University, George Washington University, Graduate Study
- Ralph W. Callender (1966) *Assistant Professor, Industrial Technology*
Syracuse University, A.B.; University of Illinois, M.S.
Registered Professional Engineer
- Judith B. Carlson (1965) *Faculty Assistant, Physical Education*
Wisconsin State University—Eau Claire, B.A.; University of Minnesota, B.S.

- Clara C. Carrison (1948) *Associate Professor, Food Science and Nutrition*
Western Illinois University, B.E.; University of Iowa, M.S.; Ohio State University, Pennsylvania State University, University of Tennessee, University of Minnesota, Iowa State University, Graduate Study
- Kay J. Carter (1966) *Faculty Assistant, Physical Education*
Wisconsin State University—La Crosse, B.S.
- Shirley Chii-Shya Chen (1966) *Assistant Professor, Food Science and Nutrition*
Taiwan Provincial Chung-Hsing University, B.S.; University of Nebraska, M.S., Ph.D.
- Tien-Ren Richard Cheng (1966) *Assistant Professor, Electronics*
Taiwan Normal University, B.S.; Stout State University, M.S.
- Dwight D. Chinnock (1940) *Professor, Industrial Teacher Education*
Wisconsin State University—River Falls, Diploma; Stout State University, B.S.; University of Minnesota, M.A., Graduate Study
- Scott Chisholm (1967) *Instructor, English*
University of Missouri, A.B., M.A.
- Donald F. Clausen (1964) *Professor, Chemistry*
University of Minnesota, M.A., Ph.D.
- Lee Roy Clendenning (1967) *Instructor, Electronics*
State University College at Oswego, New York, B.S.; Ohio University, M.Ed.
- Dorothy F. Clure (1956) *Assistant Professor, Home Management, Family Economics and Equipment*
Stephens College, A.A.; Iowa State University, B.S.; University of Chicago, M.A.; University of Minnesota, University of Wisconsin, Graduate Study
- Darrell D. Coffey (1967) *Assistant Professor, Vocational Rehabilitation*
University of Iowa, B.A., M.A.
- James A. Collier (1965) *Instructor, Power Technology*
Indiana Institute of Technology, Indiana University, Ball State University, B.S.; Stout State University, M.S.
- Harold R. Cooke (1963) *Visiting Professor, Music*
Minneapolis College of Music, B.S.; McPhail College of Music, M.M.E.; University of Minnesota, New England Conservatory of Music, Graduate Study
- E. Wayne Courtney (1962) *Professor, Graduate College*
Purdue University, B.S., M.S., Ph.D.
- Sue Crosswell (1966) *Instructor, Home Management, Family Economics and Equipment*
University of Minnesota, B.A., M.A.
- Douglas A. Cumming (1967) *Instructor, Art*
Drake University, B.F.A.; Indiana University, M.F.A.

- Mary Frances Cutnaw (1957) *Associate Professor, Speech*
University of Wisconsin, B.S., M.S.; Graduate Study
- Lorraine C. Dahlke (1966) *Professor, Food Science and Nutrition*
University of Wisconsin, B.A.; University of Minnesota, B.A.; State
University, Iowa City, M.S.; Ohio State University, Ph.D.
- James R. Daines (1963) *Associate Professor, Electronics*
Stout State University, B.S., M.S.; University of Michigan, University
of Houston, University of Missouri, Graduate Study
- Marian Deininger (1959) *Professor. Chairman, Department of Social
Science*
University of Minnesota, B.A., M.A., Ph. D.
- Ervin A. Dennis (1966) *Associate Professor, Graphic Arts*
Colorado State College, B.A., M.A.; Texas A & M, Ed.D.
- Joanne R. Desotelle (1967) *Instructor, English*
Moorehead State College, B.A., M.A.
- John C. Deutscher (1966) *Assistant Professor, Education & Psychology*
Wisconsin State University—Eau Claire, B.S.; Stout State University,
MS.; University of North Dakota, Ed.D.
- Donald A. Dickman (1961) *Assistant Professor, Biology*
Lakeland College, B.S.; South Dakota State University, M.S.; Iowa
State University, South Dakota State University, Graduate Study
- Carol A. Dobrunz (1965) *Instructor, Physical Education*
Wisconsin State University, La Crosse, B.A.; University of Mich-
igan, M.A.
- Gerald Donley (1965) *Instructor, Coordinator of School Relations*
Wisconsin State University—River Falls, B.S.; Stout State Uni-
versity, M.S.
- Mary R. Donley (1959) *Assistant Librarian, Assistant Professor*
University of Minnesota, B.A., M.A.; Columbia University, Graduate
Study
- Edwin W. Dyas (1956) *Associate Professor, Wood Technics and Plas-
tics*
University of Nebraska, B.S.; University of Minnesota, M.A.; Uni-
versity of Omaha, Stout State University, Graduate Study
- John F. Entorf (1967) *Associate Professor, Chairman of Department
of Metals*
Northern Montana College, B.S.; Texas A & M, M.E., Ed.D.
- Kenneth J. Erickson (1961) *Assistant Professor, Industrial Graphics*
Wisconsin State University—Platteville, B.S.; University of Min-
nesota, M.A., Graduate Study
- Wesley L. Face (1957) *Assistant Dean, Graduate College. Co-Director
of American Industry Project. Professor*
Northern State College, South Dakota, B.S.; Stout State University,
M.S.; University of Illinois, Ed.D.

- Noel J. Falkofske (1962) *Assistant Professor, Speech*
Wisconsin State University, River Falls, B.S.; Kent State University, M.A.
- Michael W. Fedo (1966) *Instructor, Speech*
University of Minnesota, Duluth, B.S.; Kent State University, M.A.
- John Fisk (1966) *Instructor, Speech*
Eastern Illinois University, B.S.; Bowling Green State University, M.A.
- Eugene R. F. Flug (1962) *Associate Professor, Co-Director of American Industry Project*
University of Minnesota, B.B.A., B.S., M.A., Ph.D.
- Steve P. Fossum (1966) *Assistant Professor, Physics*
St. Olaf College, B.S.; University of Wisconsin, M.A.
- Richard P. Friedrich (1961) *Assistant Professor, English*
St. Procopius College, A.B.; University of Wisconsin, M.S.
- Orazio Fumagalli (1964) *Chairman of Department of Art. Professor*
State University of Iowa, B.A., M.F.A., Ph.D.
- John Furlong (1963) *Vice President for University Relations. Professor*
University of Minnesota, B.S., M.A., Ph.D.
- David A. Gamache (1967) *Instructor, Art*
Rhode Island School of Design, B.F.A.; Tulane University, M.F.A.
- Jack A. Ganzemiller (1963) *Assistant Professor. Director of Field Experience Programs*
General Motors Institute, B.M.E.; Purdue University, M.S.; University of Minnesota, Graduate Study
- Clifford C. Gauthier (1963) *Associate Professor, Mathematics*
St. Cloud State College, B.S.; Bemidji State College, M.S.; Boston College, Graduate Study
- Richard Harrold Gebhart (1965) *Assistant Professor, American Industry Project*
Northern State Teachers College, B.S., M.S.
- Glenn Gehring (1965) *Assistant Professor, Metals*
South Dakota State University, B.S.; Stout State University, M.S.; University of Illinois, Graduate Work
- Robert L. Gibson (1966) *Instructor, English*
Grinnell College, B.A.; University of Chicago, M.A.
- Earl W. Gierke (1962) *Associate Professor. Chairman of Department of Mathematics*
University of Minnesota, B.S., M.A., Graduate Study
- Douglas D. Gingrich (1967) *Assistant Professor, Education and Psychology*
Bradley University, B.S.; Colorado State College, M.A., Ed.D.
- Margaret Ann Glennon (1967) *Instructor, Clothing and Textiles*
Stout State University, B.S.; M.S.

- Ed Gold (1967) *Assistant Professor, Chemistry*
University of Wisconsin, B.S., M.S.
- Rebecca Gralow (1967) *Instructor, Food Science and Nutrition*
Stout State University, B.S.; Kansas State University, M.S.
- William H. Granse, Jr. (1967) *Instructor, English*
University of Michigan, B.S.; Wayne State University, M.A.
- Patrick J. Haberman (1967) *Instructor, Audio-Visual Education*
Mankato State College, B.S., M.S.
- Harold Halfin (1956) *Associate Professor, Metals*
Fairmont State College, A.B.; Stout State University, M.S., University
of West Virginia, Graduate Study
- Joann Hallaway (1966) *Associate Professor and Acting Head, Home
Management, Family Economics and Equipment*
University of Tennessee, B.S., M.S.; Ohio State University, Graduate
Study
- Robert E. Haltner, Sr. (1966) *Instructor, Education and Psychology*
Concordia Theological Seminary, B.A.; Inter-Lutheran Seminary,
Ph.D.; St. Francis College, M.S.
- William J. Hanley (1967) *Associate Professor, Child Development and
Family Relations*
University of Minnesota, B.A.; Florida State University, M.A., Ph.D.
- Raymond A. Hansen (1967) *Faculty Assistant, Industrial Technology*
Stout State University, B.S., M.S.
- Myron Harbour (1947) *Associate Professor, Physics*
Wisconsin State University—Superior, B.E.; University of Wisconsin,
Ph.M.
- Robert R. Hardman (1964) *Associate Professor, Audio-Visual Educa-
tion*
Maryland State College, B.S.; Indiana University, M.S.
- Margaret E. Harper (1943) *Associate Professor, Home Economics
Teacher Education*
Kansas Wesleyan University, B.S.; Kansas State University, M.S.;
Colorado State University, Iowa State University, Graduate Study
- Howard S. Heise (1967) *Instructor, Speech*
Wisconsin State University—River Falls, B.S.; State University of
South Dakota, M.S.
- Ellen Kay Henry (1966) *Instructor, Clothing and Textiles*
Harding College, B.S.; University of Wisconsin, M.S.
- Harry A. Herbert (1965) *Assistant Professor, Audio-Visual Education*
Bowling Green State University, B.S.; Stout State University, M.S.
- James F. Herr (1965) *Assistant Professor, Graphic Arts*
Stout State University, B.S., M.S., University of Missouri

- Marybelle Hickner (1965) *Assistant Professor, Home Economics Teacher Education*
University of Minnesota, B.S., M.A., Graduate Study
- Robert D. Hires (1966) *Instructor, English*
Loras College, B.A.; DePaul University, M.A.
- Armand G. Hofer (1964) *Associate Professor, Wood Technics and Plastics*
Northwest Missouri State College, B.S.; University of Missouri, M.Ed., Ed.D.
- Paul R. Hoffmann (1964) *Professor, Director of Counseling Center. Director of Vocational Rehabilitation Training Program*
University of Maine, B.A.; University of Iowa, University of Arizona, Ed.D.
- Robert Hokeness (1965) *Instructor, Wood Technics and Plastics*
Mankato State College, B.S.; Stout State University, M.S.
- Adelyn Hollis (1967) *Associate Professor, Counseling Center*
Eastern Michigan University, B.S.; University of Michigan, M.S., Ph.D.
- Veryle E. Homuth (1966) *Associate Professor, Education and Psychology*
Valley City, North Dakota, B.S.; North Dakota University, M.S., Ed.D., University of Wisconsin, Post Doctoral
- John M. Houle (1967) *Assistant Professor, Education and Psychology*
St. Louis University, B.S., Stout State University, M.S.; University of Wisconsin, Ph.D.
- Dennis E. Howley (1966) *Instructor, Library*
Wisconsin State University—Platteville, B.S.; Western Michigan University, M.S.
- Robert L. Hoyt (1967) *Assistant Professor, Counseling Center*
Northwestern University, B.S., M.A.
- Ralph G. Iverson (1951) *Vice President for Student Services. Professor, Education and Psychology*
Augustana College, B.S.; University of Minnesota, M.A.; University of California, Ed.D.
- Margaret A. James (1961) *Assistant Professor, Food Science and Nutrition*
University of Wisconsin, B.S., M.S.; University of Minnesota, Graduate Study
- John A. Jarvis (1946) *Vice President for Academic Affairs. Professor*
University of Wisconsin, B.S. in Mechanical Engineering; Stout State University, B.S.; Wayne State University, M.Ed.; University of Minnesota, Ph.D.; Registered Professional Engineer
- John J. Jax (1959) *Assistant Librarian. Assistant Professor*
Wisconsin State University—La Crosse, B.A.; University of Wisconsin, M.S.; University of Minnesota, Graduate Study

- Dorothy Jensen (1966) *Assistant Professor, Clothing and Textiles*
Illinois State University, B.S.; New York University, M.S., University of Illinois, Colorado A.&M., Graduate Study
- Gust Jensen III (1965) *Assistant Professor, Education and Psychology*
University of Missouri, B.S., M.A., Graduate Study
- Emily Jensen (1966) *Instructor, English*
Ripon College, Ph.B.; Winona State College, M.E.
- Michael J. Jerry (1962) *Assistant Professor, Art*
Rochester Institute of Technology, B.F.A., M.F.A.; Cranbrook Academy of Art, Graduate Study
- Joy Ann Jocelyn (1966) *Instructor, Food Science and Nutrition*
Hunter College, B.S.; New York University, M.S.
- Duane A. Johnson (1966) *Instructor, Metals*
Northern State Teachers College, South Dakota, B.S., M.A.
- Eleanor Mae Johnson (1967) *Assistant Professor, Home Economics Teacher Education*
Stout State University, B.S., M.S.; University of Wisconsin, Graduate Study
- Ray C. Johnson (1938) *Chairman of Department of Physical Education. Professor*
Moorhead State College, B.E.; Columbia University, M.A.; New York University, Graduate Study
- Gordon G. Jones (1965) *Instructor, Mathematics*
North Dakota School of Forestry, North Dakota State University, B.S., M.Ed.
- R. Keith Jones (1967) *Instructor, Speech*
Eastern Illinois University, B.S.; University of Illinois, A.M.
- Peter Kavanagh (1966) *Associate Professor, English*
National University of Ireland, B.A., M.A.; Trinity College, Dublin, Ph.D.
- John M. Kainski (1967) *Associate Professor, Biology*
University of Lwow, Lwow, Poland, Dipl. Engl.; Kansas State College, M.S.; Cornell University, Ph.D.
- Mercedes H. Kainski (1967) *Professor, Food Science and Nutrition*
University of Wisconsin, B.S., M.A., Ph.D.
- R. Frank Kehrberg (1967) *Instructor, Power Technology and Industrial Technology*
University of Wisconsin, B.S.; Registered Professional Engineer
- Alta Belle Kemp (1966) *Assistant Professor, Food Science and Nutrition*
Mary Hardin Baylor College, B.A., B.S.; Southwestern Baptist Theological Seminary, M.R.E.; Texas Woman's University, M.S.; Ph.D.
- Bonnie M. Kirkwood (1964) *Instructor, Clothing and Textiles*
State College of Iowa, B.A.; State University of Iowa, M.A.

- Dick G. Klatt (1952) *Assistant Professor, Metals*
Stout State University, B.S., M.S.
- Allan A. Klink (1966) *Instructor, Assistant Director of Student Activities*
Wisconsin State University—La Crosse, B.S., M.S.
- O. Clifford Kubly (1956) *Assistant Professor, Physics*
Wisconsin State University, Platteville, B.E.; University of Wisconsin, M.S.; Case Institute of Technology, University of South Carolina, Graduate Study
- Marvin M. Kufahl (1956) *Assistant Professor, Metals*
Stout State University, B.S., M.S.
- Joseph M. Larkin (1966) *Assistant Professor, Director of Financial Aid*
Wisconsin State University—La Crosse, B.S.; Oklahoma State University, M.S., Ed.D.
- Lorna S. Lengfeld (1956) *Professor, Speech*
State College of Iowa, Northwestern University, University of Minnesota, University of Wisconsin, B.A., University of Wisconsin, M.A., Ph.D.
- James P. Ley (1967) *Instructor, Mathematics*
Lakeland College, B.A.; Montana State College, M.S.
- David Wei-Ping Liu (1964) *Associate Professor, Economics*
National Chengchi University, B.S.; University of Kentucky, M.S.; University of Minnesota, Ph.D.
- Richard E. Longfellow (1966) *Assistant Professor, Vocational Rehabilitation*
West Virginia University, B.S., M.S.
- Edward M. Lowry (1959) *Professor, Biology*
Ripon College, A.B.; University of Michigan, University of North Carolina, Michigan State University, University of Missouri, Ph.D.
- Edward S. Lund, Jr. (1967) *Faculty Assistant, Graduate College*
Wisconsin State University—Eau Claire, B.S.
- Sara Lynn McMillan (1967) *Instructor, Speech*
Denver University, B.A.; University of Minnesota, M.A.
- Daniel O. Magnussen (1965) *Assistant Professor, History*
University of Montana, B.A., M.A., Graduate Study
- Luther A. Mahan (1966) *Associate Professor, Biology*
Iowa State College, B.S.; Pennsylvania State University, M.S., D.Ed.
- Rita Todd Mahan (1963) *Associate Professor, Clothing and Textiles*
Stout State University, B.S., M.S.
- Eino Maki (1963) *Associate Professor, Mathematics*
Ferris Institute, B.S.; University of Wisconsin, M.S.
- Dion R. Manriquez (1967) *Instructor, Art*
University of Omaha, B.F.A.; University of Iowa, M.A., M.F.A.

- Anne Marshall (1939) *Chairman of Department of Science. Professor, Biology*
Denison University, B.S.; Ohio State University, M.A., Ph. D.
- Mary Beth McDuffee (1964) *Instructor, English*
Wilson College, B.A.; The John Hopkins University, M.A.; Southern Illinois University, Graduate Study
- Lynda C. McGraw (1966) *Instructor, Clothing and Textiles*
Berea College, B.S.; University of North Carolina, M.S.
- David A. McNaughton (1966) *Associate Professor, Counseling Center*
Stout State University, B.S.; University of Wyoming, M.Ed.; Ph.D.
- Ella Jane Meiller (1950) *Head of Department of Food Science and Nutrition. Professor*
Kansas State University, B.S.; University of Wisconsin, M.S.; Kansas State University, University of Minnesota, Graduate Study
- Robert J. Melrose (1958) *Associate Professor, History and Political Science*
Stout State University, Wisconsin State University—Eau Claire, B.S.; Wisconsin State University—Superior, University of Minnesota, M.A.; Graduate Study
- Paul F. Menges (1967) *Associate Professor, Business Administration*
George Washington University, B.A.; Columbia University, M.A.
- Richard H. Miller (1964) *Associate Professor, Mathematics*
Moorehead State College, B.S.; North Dakota State University, M.S.
- Beatrice Mavis Mills (1965) *Assistant Professor, Child Development and Family Relations*
Kindergarten College, Brisbane, Australia, Diploma; Indiana State University, M.S.
- Dwain P. Mintz (1962) *Assistant Professor, Physical Education*
Mankato State College, B.S., M.S.
- Harlyn Misfeldt (1965) *Instructor, American Industry Project*
Stout State University, B.S.; M.S.
- Louis A. Moegenburg (1967) *Assistant Professor, Industrial Graphics*
Stout State University, B.S., M.S.
- John M. Molitor (1966) *Instructor, Physical Education*
North Central College, B.S.; Northern Illinois University, M.A.
- Saadia S. Mohamed (1967) *Associate Professor, Clothing and Textiles*
College of Home Economics, Cairo, Egypt, B.S.; Texas Woman's University, M.S., Ph.D.
- Edward O. Morical (1957) *Associate Professor, Power Technology*
Bemidji State College, B.S.; Wayne State University, M.Ed., Graduate Study
- Arthur Muller (1965) *Instructor, Metals*
Stout State University, B.S., M.S.

- George H. Nelson (1966) *Assistant Professor, Biology*
Wisconsin State University—Superior, B.S.; Colorado State University, Fort Collins, M.S.
- Orville Nelson (1963) *American Industry Project. Associate Professor*
Stout State University, B.S.; University of Minnesota, M.A., Ph.D.
- Barbara Nemeck (1967) *Instructor, Clothing and Textiles*
Stout State University, B.S., M.S.
- Otto Nitz (1952) *Professor, Chemistry*
Elmhurst College, B.S.; University of Iowa, M.S., Ph.D.
- Courtney W. Nystuen (1967) *Instructor, Industrial Graphics*
St. Olaf College, B.S.; University of Minnesota, B.Arch., Registered Professional Engineer
- Erich Richard Oetting (1945) *Dean, School of Education. Chairman of Department of Education and Psychology. Professor*
Wayne State Teachers College, B.A.; University of Wisconsin, University of Nebraska, M.A., Ph.D.
- Donald Duane Olsen (1965) *Assistant Librarian, Instructor*
University of Minnesota, B.A., M.A.
- K. T. Olsen (1947) *Associate Professor, Wood Technics and Plastics*
Iowa State University, B.S., M.S., Graduate Study
- Mildred K. Olsen (1965) *Instructor, English*
Wooster College, A.B.; Northwestern University, M.A.
- Arnold E. Olson (1964) *Assistant Professor, Sociology*
Augustana College, B.A.; Stout State University, M.A.; University of Minnesota, Graduate Study
- Gene A. Olson (1965) *Assistant Professor, Biology*
Luther College, B.A.; University of Michigan, M.A.; St. Mary's College, Graduate Study
- Harry Olstad (1967) *Assistant Professor, American Industry*
Stout State University, B.S., M.S.
- Charlotte L. Orazem (1966) *Assistant Professor, Clothing and Textiles*
University of Idaho, B.S.; Colorado State University, M.E., Colorado University, Western State College of Colorado, Southern Colorado State College, Graduate Study
- Angelo Ortenzi (1965) *Associate Professor. Director of Student Activities and Student Center*
Hershey Junior College, Pennsylvania State University, B.S., M.Ed., D.Ed.
- William Owen (1961) *Professor, Chemistry*
Colorado State University, B.S.; University of Denver, M.A.; Colorado State College, Ed.D.
- George S. Peltier (1966) *Instructor, Metals*
Central Michigan University, B.S., M.S.

- Frank R. Pershern (1966) *Associate Professor, Wood Technics and Plastics*
State Teachers College, St. Cloud, Minnesota, B.S.; Stout State University, M.S.
- John A. Perri (1966) *Instructor, Art*
Indiana State College, B.S.; State Teachers College, Indiana, Pennsylvania, M.E.; State University of New York, M.F.A.
- Wesley J. Peterson (1966) *Instructor, Business Administration*
Mankato State College, B.A.; St. Cloud State College, M.B.A.
- Robert L. Phelps (1961) *Assistant Professor, English and Journalism*
Morningside College, B.A.; Syracuse University, M.A.; University of Wisconsin, Graduate Study
- Stennett B. Pierce (1965) *Faculty Assistant, Physical Education*
Wisconsin State University—La Crosse, B.S.
- Arnold C. Piersall (1960) *Professor. Chairman of the Department of Wood Technics and Plastics*
Iowa State Teachers College, B.A.; Colorado State College, M.A.; University of Missouri, University of Wyoming, Colorado State College, Ed.D.
- Sharon E. Piller (1967) *Faculty Assistant. School Relations*
Stout State University, B.S.
- John W. Pimlott (1967) *Assistant Professor, Art*
Bowling Green State University, B.F.A., M.A.
- Jean Ann Poirier (1967) *Instructor, Education and Psychology*
Bemidji State College, B.S.; University of Minnesota, M.A.
- Frederick A. Pope, Jr. (1967) *Assistant Professor, Child Development and Family Life*
University of Illinois, B.S.; University of the South, B.D., S.T.M.
- Merle M. Price (1929) *Dean of Men. Professor, Political Science*
St. Cloud State College, Diploma; University of Minnesota, B.A., M.A., Graduate Study
- Neal W. Prichard (1962) *Professor, Industrial Teacher Education*
University of Minnesota, B.S., M.A.; Pennsylvania State University, Ed.D.
- Lynn L. Pritchard (1965) *Instructor, Music*
Wisconsin State University, Eau Claire, B.S.; Colorado State College, M.A.
- Cecelia Pudelkewicz (1967) *Professor, Food Science and Nutrition*
Villa Maria College, B.A.; Pennsylvania State University, M.A.; Iowa State University, Ph.D.
- Dennis Raarup (1963) *Associate Professor, Physical Education*
Gustavus Adolphus College, B.S.; University of Minnesota, M.A.
- Mary Josephine Rathke (1959) *Assistant Professor, English*
College of Saint Teresa, A.B.; University of Wisconsin, M.A.

- Jamie D. Reid (1966) *Assistant Professor, Sociology*
University of Minnesota, B.A., M.A.
- Matthew Reneson (1949) *Assistant Professor, Mathematics*
Fitchburg Teachers College, B.S.; University of Minnesota, M.A.;
Wayne State University, Clark University, University of Missouri,
University of Wisconsin, University of Illinois, Graduate Study
- Charles F. Rhoads (1966) *Instructor, Power Technology*
Indiana State University, B.S.; Eastern Illinois University, M.A.
- Evelyn G. Rimel (1961) *Professor, Education and Psychology*
Montana State University, B.A., M.A.; Syracuse University, Ph.D.;
Merrill-Palmer Institute, Post-doctoral study
- Michael D. Ritland (1964) *Associate Professor, Education and Psychology*
Luther College, B.A.; Colorado State College, M.A., Graduate Study
Utah State University, B.S.; Brigham Young University, M.S.; Cornell
University, Ph.D.
- Agnes Ronaldson (1965) *Professor. Dean of the School of Home Economics*
Cornell University, B.S.; New York University, M.A.; Columbia University, Ed.D.
- Charlotte L. Rose (1961) *Associate Professor, Home Management*
Olivet Nazarene College, B.S.; University of Illinois, M.S., Graduate Study
- Jane Rosenthal (1962) *Professor, Home Economics Teacher Education*
Stout State University, B.S., M.S.; Colorado State University, Ed.D.
- Milton I. Rube (1967) *Instructor, Mathematics*
University of Wisconsin-Milwaukee, B.S.; University of Wisconsin, M.S.
- E. Robert Rudiger (1952) *Professor. Chairman of Department of Industrial Teacher Education*
Stout State University, B.S., M.S.; University of Missouri, Ed.D.
- K. L. Rue (1957) *Assistant Professor, Physics*
University of North Dakota, B.A.; University of Minnesota, M.S.;
Ohio University, Kansas University, Michigan State University, Graduate Study
- Philip W. Ruehl (1948) *Chairman of Department of Electronics. Professor, Electronics*
Stout State University, B.S., M.S.; University of Minnesota, Ph.D.
- James J. Runnalls (1966) *Associate Professor, Wood Technics and Plastics*
University of Wyoming, B.S.; Colorado State University, M.Ed.; University of Missouri, Ed.D.
- Nelva E. Runnalls (1966) *Associate Professor, Chemistry*
Nebraska State College, B.S.; Mankato State College, M.S.; University of Missouri, Ph.D.

- Lydia S. Rutkowski (1966) *Instructor, Social Science*
University of Illinois, B.S., M.S.
- John Sabol (1964) *Associate Professor, Social Science*
Michigan State University, B.A., M.A.; Ohio State University, Graduate Study
- Francis A. Sakiey (1965) *Instructor, Industrial Technology*
Rider College, B.S.; Eastern Michigan University, M.S.
- Guy Salyer (1948) *Professor, Education and Psychology*
University of Missouri, A.B., A.M.; University of Nebraska, Ph.D., Columbia University, University of Minnesota, Post Doctoral
- Jeanne Salyer (1949) *Instructor, Clothing and Textiles*
Kent State University, B.S.; University of Wisconsin, M.S.
- Jack Sampson (1957) *Chairman, Power Technology Department. Professor*
University of North Dakota, B.S.; Stout State University, M.S.; University of North Dakota, Ph.D.
- Robert T. Sather (1960) *Assistant Professor, English*
St. John's University, B.S.; Marquette University, M.A.; University of Wisconsin, Graduate Study
- Reinhard O. Schmidt (1967) *Assistant Professor, Education and Psychology*
Wisconsin State University—Oshkosh, B.S.; Wisconsin State University—Superior, M.Ed.; University of South Dakota, Graduate Study
- William Schulman (1966) *Instructor, Art*
University of Wisconsin, B.S.; M.S.
- Robert N. Schunk (1967) *Assistant Professor. Acting Registrar*
Wisconsin State University—Stevens Point, B.S.; Northwestern University, M.A.; Boston University, University of Wisconsin, Graduate Work
- August J. Schulz (1964) *Assistant Professor, Driver-Safety Education*
Stout State University, B.S.; New York University, M.A.; Graduate Study
- Lorry M. Sedgwick (1965) *Associate Professor, American Industry Project*
Kansas State College, B.S.; Southern Illinois University, M.S.; Purdue University, Ph.D.
- Hunter B. Shirley (1966) *Assistant Professor, Education and Psychology*
Louisiana College, B.A.; Baylor University, M.A.; Sorbonne University, Paris, France, Graduate Study
- Edwin Siefert (1949) *Associate Professor, Industrial Graphics*
Stout State University, B.S.; Wayne State University, M.E.; Stout State University, Pennsylvania State University, University of Illinois, University of New York, Bradley University, Graduate Study

- Lee Harold Smalley (1965) *Associate Professor, Industrial Teacher Education*
State College of Iowa, B.S.; University of Maryland, M.Ed.; Michigan State University, Ed.D.
- Zenon T. Smolarek (1966) *Instructor, Industrial Technology*
Stout State University, B.S.; M.S.
- John A. Snoddy (1967) *Assistant Professor, Chemistry*
Grinnell College, B.S.; University of Chicago, M.S.
- George A. Soderberg (1945) *Associate Professor, Wood Technics and Plastics*
Stout State University, B.S.; University of Minnesota, M.A.
- Lanore Sogard (1967) *Assistant Professor, Child Development and Family Life*
Iowa State University, B.S.; Kansas State University, M.S.
- Wesley S. Sommers (1965) *Special Assistant to the President. Professor*
University of Michigan, B.S.E., A.M.; Syracuse University, University of Minnesota, Ph.D.
- Judy E. Spain (1967) *Instructor. Assistant Director of Housing*
State College of Iowa, B.S., M.A.
- Max Sparger (1959) *Assistant Professor, Physical Education*
University of Dubuque, B.S.; Macalaster College, M.Ed.
- Paul Speidel (1964) *Assistant Professor, Metals*
Ellendale State College, B.S.; Colorado State University, M.E.; Northern State College, Graduate Study
- Robert Spinti (1957) *Associate Professor, Electronics*
Stout State University, B.S., M.S.; Pennsylvania State University, University of Missouri, Graduate Study
- Bessie S. Spratt (1963) *Assistant Professor, Home Economics Teacher Education*
Iowa State University, B.S., Michigan State University, State University of Iowa, Iowa State University, M.S.; North Dakota State University, Graduate Study
- Douglas D. Stallsmith (1966) *Instructor, American Industry*
Miami University, B.S., M.A.
- John B. Stevenson (1966) *Professor, Education and Psychology*
Wittenberg University, B.S.; Hamma Divinity School, B.D.; Wittenberg University, M.Ed.; Ohio State University, Ph.D.
- Robert Swanson (1950) *Dean of the Graduate College. Professor*
Stout State University, B.S., M.S.; University of Minnesota, Ph.D.

- Raymond Szymanski (1968) *Assistant Professor, Director for Research and Development Proposals*
Wisconsin State University-Stevens Point, B.S.; University of Minnesota, M.A.; Graduate work
- Albert H. Tao (1967) *Assistant Professor, Chemistry*
University of Shanghai, China, B.A.; Illinois Institute of Technology, M.S.
- Charles L. Thomas (1966) *Professor, Graphic Arts*
Stout State University, B.S., M.S.; Colorado State College, Ed.D.
- Rohnn Bruce Thompson (1967) *Assistant Professor. Child Development and Family Life*
Southern Illinois University, B.A., M.S.
- Hans E. Timper (1967) *Instructor, Industrial Graphics*
Stout State University, B.S., M.S.
- John B. Tokheim (1967) *Assistant Professor, English*
Luther College, A.B.; Florida State University, M.S.E.
- Louis Tokle (1965) *Associate Professor, Economics*
University of Montana, B.A.; University of Denver, M.B.A.; University of California, University of Montana, Graduate Study
- Lloyd Trent (1965) *Assistant Professor. Coordinator of University Relations*
University of North Dakota, B.A., M.S.
- Thomas T. Tsuji (1967) *Assistant Professor, Industrial Teacher Education*
Stout State University, B.S., M.S.; Michigan State University, Ed.D.
- Mildred Turney (1965) *Professor. Chairman of Department of Home Economics Teacher Education*
University of Connecticut, B.S.; Pennsylvania State University, M.Ed.; University of Illinois, Florida State University, Columbia University, Ed.D.
- Willis L. Valett (1966) *Assistant Professor, Safety-Driver Education*
State College of Iowa, B.S.; University of Iowa, M.A.
- Alyce D. Vanek (1954) *Assistant Professor, Art*
Stout State University, B.S., M.S.
- Hazel Van Ness (1929) *Professor, Clothing and Textiles*
Syracuse University, B.S.; Columbia University, M.A.; Columbia University, Michigan State University, University of Tennessee, Graduate Study
- Mary W. VanSickle (1967) *Associate Professor, Assistant Dean, School of Home Economics, Director of Graduate Program in Clothing and Textiles*
Texas Women's University, B.S., M.S., Graduate work
- Charles E. Yost (1966) *Faculty Assistant, American Industry Project*
Stout State University, B.S.

- Freda M. Wright (1966) *Dean of Women, Assistant Professor*
Carroll College, B.A.; University of Wisconsin, M.A.
- Lawrence S. Wright (1967) *Professor, Graduate College*
Stout State University, B.S., M.S.; University of Missouri, Ed.D.
- Robert Wurtz (1965) *Assistant Professor, Education and Psychology*
Rockhurst College, B.S.; University of Wyoming, M.A.; Kansas State University, University of Wyoming, Graduate Study
- Norman C. Ziemann (1949) *Head of Department of Speech. Professor*
Wisconsin State University—La Crosse, B.S.; Northwestern University, M.A., Ph.D.
- Michael Zingale (1967) *Instructor, Art*
University of Wisconsin, B.S.; Yale School of Art and Architecture, M.F.A.
- John G. Zuerlein (1966) *Instructor, American Industry*
Stout State University, B.S., M.S.
- Betty Jane Viens (1963) *Assistant Professor, Food Science and Nutrition*
University of Wisconsin, B.S.; Stout State University, M.S.
- G. S. Wall (1952) *Professor, Education. Director of Graduate Admissions*
Winona State College, Diploma; University of Minnesota, B.S., M.A., Ph.D.
- Bruce Walley (1965) *Assistant Professor, Industrial Teacher Education*
University of Northern Illinois, B.S.; Stout State University, M.S.; University of Missouri, Graduate Study
- Robert L. Ward (1967) *Instructor, Audio-Visual Education*
Wisconsin State University—La Crosse, B.S.; Stout State University, M.S.
- Willis E. Weeks (1967) *Instructor, English*
Oklahoma City University, B.A.; Oklahoma State University, M.A.
- Lloyd Whydolski (1949) *Coordinator of Printing. Associate Professor*
Stout State University, B.S.; Colorado State College, M.A.
- Theodore E. Wiehe (1954) *Professor, Industrial Teacher Education*
Oklahoma State University, B.S., M.S.; University of Missouri, Ed.D.
- Douglas A. Wikum (1966) *Instructor, Biology*
Wisconsin State University—Stevens Point, B.S.; University of South Dakota, M.A.
- John A. Will (1965) *Instructor, Art*
State College of Iowa, B.A.; State University of Iowa, M.F.A.

- Mary K. Williams (1954) *Assistant Professor, Art*
University of Wisconsin, B.S., M.A.; Graphis Lehr and Versuchanstalt, Hertha Buchner Keramics, Vienna, New York University, Chicago Institute of Design, University of Wisconsin, Chicago Art Institute, University of Illinois, Graduate Study
- Richard Wilson (1966) *Instructor, Biology*
Kansas State University, B.S., M.S.
- Robert F. Wilson (1960) *Assistant Professor, Art*
Ohio State University, B.F.A., M.A., M.F.A.
- Charles E. Wimmer (1966) *Instructor, Art*
University of Minnesota, B.A., M.F.A.
- Richard Wold (1964) *Art*
University of Minnesota, Duluth, B.A.; San Francisco State College, M.A.; California School of Fine Arts, Graduate Study
- Eddie F. H. Wong (1966) *Instructor, Art*
University of Washington, B.A.; University of New Mexico, M.F.A.
- Samuel Wood (1964) *Associate Professor. Registrar*
State College of Iowa, B.A.; State University of Iowa, M.A., Graduate Study

EMERITUS

- Verne C. Fryklund, Ph.D. President (1945-1961)
- Clyde A. Bowman, M.S. Dean of the School of
Industrial Education (1919-1953)
- Alice J. Kirk, Ed.D. Dean of the School of
Home Economics (1947-1963)
- Keturah Antrim, Ph.M. Physical Education (1936-1965)
- Freda M. Bachmann, Ph.D. Biology (1924-1939)
- Gertrude L. Callahan, Ph.M. English (1927-1961)
- Eleanor H. Cox, M.A. Chemistry (1942-1965)
- Margaret Winona Cruise, M.S. Food and Nutrition (1927-1947)
- Fred L. Curran, M.A. Industrial Education (1908-1941)
- Lillian M. Froggatt, A.M.L.S. Librarian (1924-1955)
- Mabel Rogers Huggins, M.A. Food and Nutrition (1935-1947)
- Lillian Jeter, M.A. Clothing and Textiles (1927-1961)
- Floyd Keith, M.S. Metalworking (1922-1961)
- Mary Killian, M.A. Director of Institution Management (1947-1967)
- Ray F. Kranzusch, M.S. Mechanics (1924-1964)
- Harold C. Milnes, M.S. Machine Shop (1916-1954)
- Ann Noble, M.S. Home Economics Education (1947-1963)
- Gertrude M. O'Brien, Ph.M. Registrar (1928-1955)
- J. E. Ray, Ed.D. Drafting (1914-1959)
- Mrs. Benita Grote Smith, M.S. Child Development (1943-1967)
- Ray A. Wigen, Ph.D. Dean, School of Graduate Studies (1933-1966)

MEMBERSHIPS

American Association of Colleges for Teacher Education
American Association of Collegiate Registrars and Admission Officers
American Association of School Administrators
American Council on Education
American Health Association
American Society for Engineering Education
Association of State Colleges and Universities
Association for Student Teaching
College and University Personnel Association
Educational Film Library Association, Inc.
Lithographic Technical Foundation, Inc.
Midwest College Placement Association
National Association of Intercollegiate Athletics
National Commission on Accrediting
Wisconsin Association of Collegiate Registrars and Admission Officers
Wisconsin Federation of Music Clubs
Wisconsin State Athletic Conference
Women graduates of Stout State University are eligible for membership
in the American Association of University Women.

APPENDIX B

BOARD OF VOCATIONAL AND ADULT EDUCATION REQUIREMENTS FOR CERTIFICATION

A-V 1.01 CERTIFICATION

1. Application. This chapter applies to:
 - a. All directors, principals, supervisors, counselors, coordinators, teachers, assistant teachers, technical advisors and experts (herein referred to as teachers) employed by local boards of vocational and adult education.
 - b. All teachers who have their initial employment in Wisconsin schools of vocational and adult education after July 1, 1963. Teachers employed before the above date may elect to comply with the regulations as set forth herein, or with the regulations as set forth in Teacher Training Bulletin #300 revised March 3, 1953, abridged 1956.
2. Determination of status. Certificates will be granted based upon teacher training forms and transcripts as submitted to the State Board of Vocational and Adult Education.
3. Issuance of certificate. Upon request of the local director, credentials of status will be issued by the State Director to such teachers as qualify under the regulations set forth herein.
4. Appeal.
 - a. Should any teacher feel that the status granted is not commensurate with the record submitted, appeal may be made to the state director of vocational and adult education for a review of the case by a committee on credentials. Such committee to be appointed at the time of the appeal by the state director of vocational and adult education; to be

- composed of a professional member of the staff of the State Board of Vocational and Adult Education, a local director, and three members who hold certified positions comparable to the person making the appeal.
- b. Meetings of the committee will be called by the state director of vocational and adult education.
5. General provisions.
- a. Equivalency for the requirements may be established through examination by the state board of vocational and adult education or an agency appointed by the board. Any expenses incurred are to be the responsibility of the individual teachers or local board of vocational and adult education.
 - b. Education and work experience may be substituted for each other as indicated. Where substitution of work experience and/or education are made, an evaluation will be made by the state board of vocational and adult education. Such substitution may include special study through armed service schools, manufacturers' schools, correspondence courses, special tutoring and institutes approved in-service teacher training programs, successful teaching experiences, work experience in clearly related occupations, and such other experiences as may be approved by the State Board of Vocational and Adult Education.
 - c. All education and work experience requirements are to be within a ten year period from the date of application for certification. If more than ten years have elapsed, teachers will be required to gain appropriate refresher courses at the rate of 2 credits for each year which has elapsed beyond ten years or six months work experience for each year which has elapsed beyond ten years.
 - d. Teachers should demonstrate that in speech, character, personality and health, they are fit to teach the subjects named in the credentials.

A-V 1.02 TYPES OF CERTIFICATES

1. Approval. Required of all teachers who teach under 450 hours during any school year. Teachers will be considered approved upon submitting appropriate teacher training forms, unless their director(s) is notified in writing within 30 days by the State Board of Vocational and Adult Education that they are not approved.
2. Provisional certificate. Conditions: Shall be valid to the nearest August 31 date which will give a full two-year period. It will be renewable upon demonstration by the teacher of having satisfactorily completed the work required by the State Board for progress toward the Standard State Certification (a maximum of 6 credits or 4 months work experience, or a combination of these, will be required in any two-year period.) This certificate is required of all teachers who teach 450 hours or more in any one school year. The certificate period may be extended where extenuating circumstances make it impractical for an individual to fulfill the requirements. Such extension must be requested at least three months prior to the date of expiration.

3. Standard state certificate.
 - a. Shall be valid for life upon satisfactory completion of the requirements.
 - b. The certificate can be revoked by action of the State Board of Vocational and Adult Education after a hearing in which incompetence to teach is clearly indicated.

A-V 1.03 REQUIREMENTS FOR APPROVAL. Individual qualifications are subject to re-evaluation every year.

1. Educational and occupational experience shall be appropriate to the subject being taught as evaluated by the State Board of Vocational and Adult Education staff.
2. Driver education teachers hold valid Wisconsin teacher licenses and valid Wisconsin driver's license, have completed 6 semester hours of approved credits in the field of driver and safety education in an accredited teacher education college. Three semester hours shall be in driver education including behind-the-wheel instruction practice, and have demonstrated a satisfactory driving experience for two years.

A-V 1.04 REQUIREMENTS FOR PROVISIONAL CERTIFICATE.

1. Education. The following requirements must be fulfilled and the certified person must agree to work toward fulfilling the requirements for a Standard Certificate at the rate of 6 credits each two-year period or equivalent.
 - a. Teacher assistants; have completed two years of college, junior college, or technical institute, or be enrolled in a four-year teacher education program. Appropriate work experience, in addition to the work experience required, of a learning nature, may be substituted for a maximum of one-year equivalency.
 - b. Teachers, teacher coordinators, and part-time directors; have completed a Bachelor's Degree with appropriate major or minor. Appropriate work experience, in addition to the work experience requirement, of a learning nature, may be substituted by teachers of skilled subjects.
 - c. Supervisors, coordinators, counselors, master teachers, department heads; a Bachelor's Degree in appropriate field.
2. Occupational experience. The following requirements must be fulfilled and the certified person must agree to work toward meeting the work experience requirements for the Standard Certificate at the rate of 4 months experience each two years, or equivalent.
 - a. Teacher assistants; have completed one year of work experience in appropriate subject field.
 - b. Teachers, teacher-coordinator; have had appropriate successful work experience as follows: Appropriate education, beyond that required, may be substituted for no more than two-thirds of the work experience requirement.
 - (1) General subjects teacher; 3 months.
 - (2) Part-time directors, homemaking, business education, and related subjects teachers; 6 months.
 - (3) Trade and industrial, distributive teachers; 1½ years.
 - (4) Technical teachers; 6 months in area of teaching.
 - c. Directors, supervisors, coordinators, counselors, department heads, and master teachers; appropriate education

beyond that required may be substituted for no more than two-thirds of the work experience.

- (1) Appropriate successful work experience as follows:
 - (a) Supervisors, master teachers and department heads; 6 months.
 - (b) Coordinators and counselors; 1½ years.
 - (c) Directors; 3 years.

A-V 1.05 REQUIREMENTS FOR STANDARD CERTIFICATE.

1. Education. The following must be obtained in addition to the requirements for the Provisional Certificate:
 - a. Teacher assistants; have completed courses or equivalent in:
 - (1) Class management and class accounting (2 credits).
 - (2) Methods and materials of teaching (2 credits).
 - (3) History and objectives of vocational and adult education and its relationship to the total educational program (2 credits).
 - b. Teachers, teacher-coordinators, and part-time directors have completed courses or equivalent in:
 - (1) Knowledge of history and objectives of vocational adult education, and its relationship to the total educational program (2 credits).
 - (2) Knowledge of the development, growth and learning processes of the individuals to be taught (3 credits).
 - (3) Knowledge of methods and techniques of teaching and development of course material (3 credits).
 - (4) Supervised teaching experience (4 credits or equivalent).
 - (5) Teacher-coordinator to have training in and knowledge of special methods and problems of coordination (4 credits).
 - c. Directors, supervisors, coordinators, counselors, department heads and master teachers; have completed courses or equivalent in the following:
 - (1) Demonstrate the same competence as teachers.
 - (2) Demonstrate knowledge of special methods and problems relative to the position (4 credits).
 - (3) Coordinators, counselors, and master teachers to obtain a Master's Degree.
 - (4) Supervisors, department heads to obtain 30 credits or the equivalent beyond the Bachelor's Degree.
2. Occupational experience. Teacher assistants, teachers and teacher coordinators, part-time directors, supervisors, coordinators, counselors, department heads and master teachers; twice as much occupational experience as required for Provisional Certificate. (See a-b A-V 1.04 2.)
3. Teaching Experience.
 - a. Teacher assistants, teachers, teacher-coordinators, part-time directors, directors, supervisors, counselors, department heads and master teachers; complete three years of satisfactory teaching.
 - b. Directors, supervisors, counselors, coordinators, and department heads; complete three years successful experience in position for which certified.

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